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THE

BOTANICAL EXCHANGE CLUB
AND SOCIETY OF THE BRITISH ISLES.

REPORT FOR 1912

BY THE

EDITOR AND DISTRIBUTOR,

JOHN CRYER.

VOL. III. PART. IV.

PUBLISHED BY R. BLACKWELL,
BROAD STREET, OXFORD.
August 1913.

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The Subscription, 7s 6d per annum, and Non-Contributing Members' Subscription of 5s per annum, should be paid to the Treasurer and Secretary,

G. CLARIDGE DRUCE,
YARDLEY LODGE,
9 CRICK ROAD, OXFORD.

Parcels for 1913 should be sent post paid, on or before 1st December 1913, to A. BRUCE JACKSON, NORTHBROOK, 3 THE AVENUE, KEW GARDENS.

PRINTED BY T. BUNCLE & CO., ARBROATH.

August 1913.

REPORT OF THE DISTRIBUTOR FOR 1912.

THE sheets of specimens sent this year reached the unprecedented total of 8,656, being an increase of 60 % on the number submitted last year. The Distributor was thus able to send out good return-parcels to every Contributor, and from the acknowledgments received they proved very acceptable.

Most of the plants were very carefully prepared. A few might have been rejected without any loss. Fifty-eight Orders were represented, the plants being of general interest, and no Order received undue attention. The new members' contributions were good in quantity, quality, and interest.

The thanks of the Club are due to the following botanists who have very kindly assisted with notes :—Mrs E. S. Gregory, Mr W. Barclay, Mr A. Bennett, Dr C. Bucknall, Dr E. Drabble, Mr J. Groves, Prof. E. Hackel, Mr A. Henry, Pfarrer Kükenthal, Dr Lindman, Rev. E. F. Linton, Dr J. Murr, Dr Ostenfeld, Mr W. H. Pugsley, Dr Thellung, and the Rev. W. Moyle Rogers, as well as to several members of the Club. My personal thanks are due to Mr Wm. Copley, B.A., for his valuable help during the distribution of the return-parcels.

JOHN CRYER,
Editor of the Report and
Distributor for the Club, 1912.

182 BRADFORD ROAD,
SHIPLEY, YORKSHIRE,
28th March 1913.

LIST OF PARCELS RECEIVED.

	No. of Specimens.
Adamson, R. S., *B.A.*	54
Bailey, Charles, *M.Sc.*, *F.L.S.*	21
Barton, W. C.	475
Bickham, S. H., *F.L.S.*	350
Britton, C. E.	191
Brown, G. C.	460
Comber, John, *J.P.*	318
Compton, R. H., *M.A.*	46
Corstorphine, Mr and Mrs R. H.	62
Cowan, M'Taggart, jun.	353
Cryer, John	606
Cumming, L., *M.A.*	81
Druce, G. Claridge, *M.A.*, *F.L.S.*, *J.P.*	1029
Foord-Kelcey, Mrs E.	210
Hayward, Miss Ida, *F.L.S.*	108
Horwood, A. R.	41
Jackson, A. Bruce	78
Johnston, Henry Halcro, Col.	518
Little, J. E., *M.A.*	374
Lumb, D.	1017
Marshall, Rev. E. S., *M.A.*, *F.L.S.*	97
Melvill, J. Cosmo, *M.A.*, *M.Sc.*, *F.L.S.*	128
Riddelsdell, Rev. H. J., *M.A.*	798
Salmon, C. E, *F.L.S.*	37
Shoolbred, W. A., *M.R.C.S.*, *F.L.S.*	73
Travis, W. G.	33
Trower, Miss Alice	20
Vigurs, C. C., *M.D.*	317
Waterfall, Charles, *F.L.S.*	230
Webster, Alfred	21
Wheldon, J. A., *F.L.S.*	360
White, J. W., *F.L.S.*	117
Wilson, A., *F.L.S*, *F.R.Met.S.*	22
Wolley-Dod, A. H., Major	11
Total,	8656

Thalictrum majus, Crantz. Shores of Loch Rannoch, Perth, Aug. 1912.—G. C. DRUCE. "Correct, I believe; foliage large, peduncles up to two inches long."—E. S. MARSHALL.

Myosurus minimus, L. Gravelly fields, St Ippollitts, near Hitchin, Herts, April and May 1912.—J. E. LITTLE.

Ranunculus flabellatus, Desf., var. *europaeus*, Nyman. Origin, St Aubin's, Jersey; cult., Ledbury, May 31, 1912.—S. H. BICKHAM. "Beautiful specimens."—J. CRYER.

Ranunculus acris, L. Seedlings. Garden, Wembley, in stiff clay soil, v.-c. 21, May 12, 1912.—A. B. JACKSON.

Ranunculus reptans, L. Damp, sandy, and gravelly margins of Loch Leven, Kinross. Here it varied considerably in size, but could be distinguished from *R. Flammula*, which grew with it, by its smaller flowers of a different tint of yellow, and usually by its arcuate creeping growth. In one case either a hybrid with *Flammula* or a condition caused by growing among herbage was observed, Aug. 1912.—G. C. DRUCE.

Ranunculus ophioglossifolius, Vill. Near Cheltenham in some quantity over a very limited area. Kindly shown to me by Mr J. Fletcher and Mr Montgomery. It was known in this vicinity nearly 50 years ago. The specimens are a little over as I wanted to obtain it in fruit. The plant is quite distinct from *R. Flammula*, not only by the achenes being granulate, but by the smaller flowers, and larger leaves of a different outline and texture.—G. C. DRUCE. "The tubercled carpels are well shown in my specimens; they are very acceptable."—E. S. MARSHALL.

Ranunculus ophioglossifolius, Vill. Near Cheltenham, v.-c. 33, June 1912. See *Journ. Bot.* 1912, p. 316. In good quantity over a very limited area. Bears fruit generously. It is remarkable that it does not spread to other localities. It has been known in this spot for over 20 years. Dries a bad colour. The light green of this species easily distinguishes it from *R. Flammula*, though I saw one specimen as dark as the latter species.—H. J. RIDDELSDELL "Fine specimens."—J. CRYER.

Ranunculus trichophyllus, Chaix, *forma*. [Ref. No. 11.] Pond, Peldon, Essex N., May 14, 1912. This may, I think, safely be referred to *R. trichophyllus*, though luxuriant. It much resembles the smaller form from Langenhoe marshes, and like it grows in company with *R. heterophyllus*.—G. C. BROWN. "Leaves slender, collapsing;

carpels inflated at the end; style straight. All these characters favour *R. Drouetii.*"—E. S. MARSHALL. "Characteristic. The collapsing or non-collapsing of the leaves depends upon the mineral contents of the water."—J. A. WHELDON. "Yes; *trichophyllus.*"—J. GROVES.

Ranunculus trichophyllus, Chaix, *forma terrestris.* On mud by the stream near Brockenhurst, S. Hants, June 1912.—G. C. DRUCE. "Another terrestrial state. There is only one decent peduncle in these specimens and that is long and weak, unlike that of normal *trichophyllus.*"—J. GROVES.

Ranunculus heterophyllus, Weber, *forma terrestris.* [Ref. No. 4809.] Near Cheltenham, Gloster W., June 1912. Growing on mud, the type was in the pond.—G. C. DRUCE. "Possibly, but why collect these wretched terrestrial states and not the normal aquatic plant?"—J. GROVES.

Ranunculus heterophyllus, Weber. [Ref. No. 7612.] Twinstead, Essex N., May 1912.—G. C. DRUCE. "Yes."—J. GROVES.

Ranunculus heterophyllus, Weber, *forma.* Pond, Peldon, Essex N., v.-c. 19, May 14, 1912. [Ref. No. 12.] Growing intermixed in same pond with Ref. No. 11.—G. C. BROWN. "Yes."—J. A. WHELDON. "Yes; a form with glabrous carpels."—J. GROVES.

Ranunculus heterophyllus, Weber, *forma* or *var.* Pool in field, near Little, Stanney, The Wirral, Cheshire, v.-c. 58, May 11, 1912.—C. WATERFALL. "Yes; typical, but gathered early."—E. S. MARSHALL. "This is *Batrachium diversifolium*, Hiern = *R. Godronii*, Gren."—J. A. WHELDON. "Yes; I should say a weak form of *R. heterophyllus.* One would like to know if it were crowded together, which might account for its tenuity."—J. GROVES.

Ranunculus peltatus, Schrank. [Ref. No. 6602.] Twinstead, Essex N., May 1912.—G. C. DRUCE. "Yes; but too young: no fruit."—J. GROVES.

Ranunculus peltatus, Schrank. [Ref. No. 10.] Shallow pond, Langham, Essex N., v.-c. 19, May 5, 1912.—G. C. BROWN. "Yes."—J. GROVES.

Ranunculus peltatus, Schrank. × ? [Ref. No. 13.] Pond, Weeley, Essex N., v.-c. 19, May 16, 1912. I think there is little doubt of its hybrid origin, though I believe no other species occurs in the pond.—G. C. BROWN. "Very likely *R. heterophyllus* × *peltatus*; general

appearance of *peltatus*, but the submerged leaf-segments are capillary and collapsing, and the rather small flowers indicate a *heterophyllus*—parentage. It should be collected again two or three weeks later."—E. S. MARSHALL. "My specimen is not a good one, but there appears to be a suggestion of *heterophyllus*."—G. C. DRUCE. "The rather fat stem and the undeveloped carpels point to hybridity, in which case no doubt *R. peltatus* is one parent, but there is not sufficient evidence by which to suggest the other. I think Batrachian hybrids must be made out on the spot."—J. GROVES.

Ranunculus peltatus, Schrank, var. d. *penicillatus*, Dum. Cuxham, Oxford, June 1912.—G. C. DRUCE. "Not in the least like *B. penicillatum*, Dumort., which has 'feuilles submergées flasques à segments allongées et se réunissent en pinceau hors de l'eau.' I should not refer Mr Druce's plant to *R. peltatus* but should like to see fruit before expressing a definite opinion. There is no information as to habitat but I presume it occurs in running water."—J. GROVES. "I am in considerable doubt about this plant and will collect it again."—G. C. DRUCE.

Ranunculus Hiltoni, H. & J. Groves. Abundant in a small pool on border of Copthorne Common, Sussex E., v.-c. 14, April 1912. J. COMBER. "Doubtless, *R. Lenormandi* × *peltatus*."—E. S. MARSHALL. "Yes; excellent specimens."—J. GROVES.

Ranunculus hederaceus, L., var. *omiophyllus*, Ten. Floating in about 2 ft. of water, ditch near Mayford, Surrey, v.-c. 17, April 1912. —J. COMBER. "A state, rather than a good variety."—E. S. MARSHALL. "The floating state of *R. hederoceus* which goes by this name. Mr Hiern describes his form *homœophyllus* as having the style terminal and that of *hederæfolius* as lateral, but the outline of the carpels and the direction of the styles vary considerably in the same head."—J. GROVES.

Caltha palustris, L., *forma*. Boggy ground, Penyfae Common, Bridgend, v.-c. 41, May 1912. I do not think it is one of our named varieties, and indeed it may only be a form, though local conditions afford no good reason for the reduction in size, etc.—H. J. RIDDELSDELL.

Actæa spicata, L. Amongst limestone rocks near Ribblehead, altitude 1000 ft., v.-c. 64, May 25, 1912. In fair abundance.—J. CRYER.

Papaver Rhœas, L., *forma*. [Ref. No. 795.] Banstead, Surrey, July 28, 1912. Probably identical with the Poppy, from the same

neighbourhood, that I sent to the Club last year, and that was considered by those who commented upon it to be very probably *Papaver dubium* × *Rhœas*. As I do not see, apart from the form of the capsule, very strong evidence of *P. dubium*, I prefer to regard my plant as a form of aggregate *P. Rhœas*, perhaps worth distinguishing as a variety or sub-species. I believe it to be well spread in Surrey, and possess a similar plant collected at Chilworth in 1895. All the field poppies (except *R. Lecoqii*) grew with it, *P. Rhœas* var. *strigosum* included. After paying a good deal of attention to poppies, I am under the impression that *P Rhœas*, as restricted by Rouy et Foucaud, *Fl. de France*, i., p. 154, is an uncommon plant. These examples were furnished by one luxuriant plant.—C. E. Britton. "Good ripe seed in these examples rather negatives the idea of hybridity. I hope to grow them. The capsules in my example last year were apparently sterile."—J. A. Wheldon.

Papaver Rhœas, L., var. *strigosum*, Boenn. Kimble, Bucks, July 1912. Growing amongst *P. Rhœas* and *dubium*. The petals were very dark and striate. I have made my specimens very poor in my efforts to eke out ten sheets.—F. L. Foord-Kelcey. "Mr H. N. Dixon (*Journ. Bot.* 1892, 309) sowed seeds of what he thought was *strigosum*, and out of ten plants only two had appressed hairs; yet Fedde, in his *Monograph* (*Pflanz.* l.c.) makes *strigosum* a distinct species separated by nineteen others from *P. Rhœas*, and having seven varieties. Is our British *strigosum* identical with the continental one, or could the *strigosum* of Mr. Dixon's be a hybrid of *dubium*? This plant shows no signs of a *dubium* parentage."—G. C. Druce.

Papaver Rhœas, L., var. c. *Pryorii*, Druce. Cornfields, Avebury, Wilts N., v.-c. 7, June 9, 1912.—W. C. Barton. "Yes; and this is an earlier name than var. *erythrotrichum*, Fedde in *Engl. Pflanz.*, 295, 1909, which is not the same plant."—G. C. Druce. "Hairs much fewer, shorter, and paler than in the most marked examples of the variety, but I suppose coming under it, as I think Mr Druce applies the name to any plant with the hairs *tinged* with crimson."—J. A. Wheldon.

Papaver Lecoqii, Lamotte. Plentiful on chalk soil, Kimble, Bucks, June 1912. This species is much commoner in this neighbourhood (especially in our garden and on the railway banks) than *P. dubium*, L.—F. L. Foord-Kelcey.

Hypecoum pendulum, L. Alien. On waste ground near Wakefield, v.-c. 60, Aug. 16, 1912.—This interesting alien has made its appearance every year since 1902. This year there were more plants than at any previous year. No doubt out-thrown from barges carry-

ing grain.—J. CRYER. "This is *H. grandiflorum*, Benth., teste Dr THELLUNG, which he considers a sub-species."—G. C. DRUCE.

Capnoides (Corydalis) claviculata, Druce. Growing plentifully over stones at the British Camp near Galashiels, v.-c. 79, Sep. 1912.—I. M HAYWARD. "Yes, this is *Corydalis claviculata*, DC."—H. W. PUGSLEY. "Yes; and a new county record for Selkirk."—G. C. DRUCE.

Fumaria purpurea, Pugsley. Gravel pit, Meole Brace, Salop, v.-c. 40, Sept. 1912.—J. C. MELVILL. "Correct."—H. W. PUGSLEY.

Fumaria Borœi, Jord. [Ref. No. 4818.] Hinton, S. Hants, June 1912.—G. C. DRUCE. "Correct, only one sheet seen."—H. W. PUGSLEY.

Fumaria Borœi, Jord., var. *verna*, Clavaud. [Ref. No. 341]. Welland, v.-c. 37, April 18, 1912. Coll. R. F. TOWNDROW; Comm. S. H. BICKHAM. "This variety is reduced to a form *rubens* in *Fumaria in Britain*, pp. 19—26. Mr Bickham's plant may I think be so named, but the characters are much less marked than in some examples I have seen."—H. W. PUGSLEY.

Fumaria Borœi, Jord., var. *britannica*, Pugsley. Arable land, Crackington, North Cornwall, Sept. 13, 1912.—J. W. WHITE. Mr White's specimen shows a resemblance to var. *britannica* in its small flowers (for so well grown a plant) and its small fruits; but its habit is too robust for the variety and its peduncles too straight and stout. I therefore consider it should simply remain under *Borœi* type.—H. W. PUGSLEY.

Fumaria Borœi, Jord., var. *britannica*, Pugsley. Vale, Guernsey, Aug. 8, 1912.—W. C. BARTON. "The two sheets that I have seen are correctly named."—H. W. PUGSLEY.

Fumaria Bastardi, Bor. (*confusa*, Jord.). [Ref. No. 3698.] A weed in cultivated ground, Trefriw, v.-c. 49, Carnarvon, July 8, 1912.—E. S. MARSHALL. "Correct."—H. W. PUGSLEY.

Fumaria Bastardi (?), Bor. Trefriw, Carnarvonshire, v.-c. 49, July 8, 1912.—W. A. SHOOLBRED. "Correct, *F. Bastardi*, Bor."—H. W. PUGSLEY.

Fumaria officinalis, L., *forma*. Kimble, Bucks, Nov. 23, 1912. Of remarkably rampant growth, covering a clump of sweet peas, and

with stems fully 6 feet long, in highly manured ground. I did not notice it till the middle of October, but as I had been away from home for a fortnight before that it might have appeared by the beginning of the month. Early in November it seemed to be cut off by the frost. Can it be var. *scandens*?—F. L. Foord-Kelcey. "This is variety *elegans*, Pugsley, with deeply coloured flowers, vide *Fumaria in Britain*, pp. 49, 52."—H. W. Pugsley.

Fumaria officinalis, L., var. *Wirtgeni*, Haussk. Waste places, e.g. Meole gravel pits, between Meole Brace and Bayston Hill, Salop, v.-c. 40, N.C.R., Sept. 1912.—J. C. Melvill. "This is probably correct but the specimens were unfortunately collected too late and the flowers and fruits have largely disappeared."—H. W. Pugsley.

Fumaria micrantha, Lag. [Ref. No. 4817.] (*F. densiflora*, DC.). Hinton, S. Hants, June 1912.—G. C. Druce. "Yes, this is *F. micrantha*, Lag."—H. W. Pugsley.

Radicula islandica (Oeder *Fl. Danica*, p. 8, t. 409) forma *nana* (*R. palustris*, Moench *Meth*, p. 263, 1794). Loch Leven shores, Kinross, Aug. 1912.—G. C. Druce.

Draba muralis, L. In great abundance on the road-side near Miller's Dale Station, Derby, v.-c. 57, May 27, 1912.—J. Cryer.

Erophila majuscula, Jord. Fields near the sand dunes, Ainsdale, S. Lancs., v.-c. 59, April 1912.—J. A. Wheldon. "I think not; *E. majuscula* should have veined petals, and the fruit will hardly do for that. One of my specimens has long, narrow pods, and is *E. stenocarpa*, Jord.; the other I should refer to *E. verna* (*vulgaris* DC.)." —E. S. Marshall. "*Stenocarpa*, I think."—G. C. Druce.

Erophila verna (?), Meyer, var. *stenocarpa*, Jord. Above Peebles, v.-c. 78, May 1912.—M'T. Cowan, jun.

Cochlearia danica, L. Carboniferous limestone rocks, Puffin Island, Anglesea, v.-c. 52, May 18, 1912.—C. Waterfall.

Cochlearia danica, L., microphylline form. Walton, S. Lancs., v.-c. 59. Flowers, April; leaves, November 1912. This is the plant referred to in the *Report*, 1893, p. 401; 1894, p. 464; 1895, p. 469; and 1906, p. 210.—J. A. Wheldon. "I have gathered the same thing on Darlstone Head, near Swanage, Dorset, and regard it as a *state* (of dry, exposed grounds). A few years ago, in S.W. Somerset, this species was in flower on September 30."—E. S. Marshall.

Cochlearia anglica, L. Bank of R. Dee (tidal), known as "Navigation Cop," Flintshire, v.-c. 51, May 20, 1911, and May 7, 1912.—C. WATERFALL.

Sisymbrium altissimum, L. = *S. pannonicum*, Jacq. Upon a recent visit to St. Anne's-on-the-Sea, West Lancashire, I noticed, July 19, 1912, a considerable extension of the area occupied by this plant. Ten years ago it was for the most part confined to the banks of the railway bridge over St. Thomas's Road, but it is now the predominant plant in the district between Blackpool and Lytham, giving a conspicuous colour to the vegetation. It was particularly abundant about the Free Library, St. Anne's. During the same period great changes have taken place in the vegetation of the sand dunes on the Lancashire coast, due to the construction of new roads, embankments, and drainage. Ten years ago *Ambrosia artemisifolia*, L., covered several acres of ground in St Andrew's Road, South, St Thomas's Road, Orchard Road, and neighbourhood, now covered by new roads and houses. This species has extended to fresh sites in Fairhaven Road, Hornby Road, in the rear of the Free Library, and to other sites on the sandhills. One old colony off Beech Road still survives.—C. BAILEY.

Camelina sativa, Crantz. Fields of clover near Cothill, Berks, June 1912. Also seen at Bayswater, Oxford, Aug. 1912.—G. C. DRUCE. "Yes."—A. THELLUNG.

Brassica monensis, Huds. Duddon Estuary, Askham, v.-c. 69, Aug. 14, 1912. A luxuriant colony was at the top of an extremely steep and slippery bank, a place having all the appearance of being inaccessible to animals.—D. LUMB. "Yes; and now removes the query against it for 69 in *Top. Bot.*"—G. C. DRUCE.

Brassica Cheiranthus, Vill. Par Sands, East Cornwall, v.-c. 2, July 1, 1912. The leaves and lower part of the stem are not as hispid as one might expect from the books. As Mr Davey remarks in his *Flora*, it has all the appearance of a native at Par, but in the *Lond. Cat.* it is credited to the Channel Islands only.—C. C. VIGURS.

Brassica (?) *Erucastrum*, Vill. Pods and seeds. [Ref. No. 0.] These were gathered on the railway side, at Askham-in-Furness, and on the shore at Greenodd. Can any member suggest any plants which have similar sub-spherical reticulated seeds?—D. LUMB.

Capsella Bursa-pastoris, Medic., var. Aberdare, v.-c. 41, Sep. 1912. Capsules narrowish, more deeply cleft than usual; style much shorter than notch. Is this a named var.?—H. J. RIDDELSDELL. "This comes nearest to the var. *brachycarpa*, Mott."—G. C. DRUCE.

Lepidium ruderale, L. Abundantly in waste ground near a farmyard at Keyhaven, S. Hants, July 26, 1912.—J. C. MELVILL. "Correct."—J. CRYER and A. THELLUNG.

Reseda —— ? Eastfield, Rugby, July 1912. A casual single plant which appeared in my garden here. The plant differs in character from our native Resedae, and has produced no fertile capsules. There are on the sheets a number of specimens left on the plant till Sept. 20 on the chance of maturing fruit, but none appeared. The first flowers have a very faint odour of mignonette. If a hybrid it is difficult to guess its origin, as neither *R. lutea* nor *R. Luteola* occurs within several miles.—L. CUMMING. "*R. lutea*."—J. A. WHELDON and A. THELLUNG.

Helianthemum polifolium, Mill. Limestone crags facing sea, Daddy Hole Plain, S. Devon, v.-c. 3, April 17, 1912.—C. WATERFALL.

Viola sylvestris, Kit., (?) var. *punctata*, Gregory. Roadside, Wenvoe, v.-c. 41, April 18, 1912. This is a form very well known to me, one which I long supposed to be extreme *V. sylvestris*, type; but it appears (by the description) to be this variety.—H. J. RIDDELSDELL. "Yes, var. *punctata* of *V. silvestris*, Lam."—E. S. GREGORY. "The variety dates from *Hayward's Pocket Book*, 24, 1909."—G. C. DRUCE.

Viola Riviniana × *sylvestris* (?) Roadside, Monmouth to Staunton, v.-c. 35, April 24, 1911. Flower shape is that of *Riviniana*; spur-colour that of *sylvestris*. But the form, though decidedly intermediate, may not be the hybrid. Both the 'parents' were present.—H. J. RIDDELSDELL. "Possibly; though nearest to *V. Riviniana*."—E. S. GREGORY. "I cannot see any trace of *V. sylvestris* in my two examples; the foliage, calyx-appendages, and spur are all characteristic of *V. Riviniana*."—E. S. MARSHALL.

Viola Riviniana, Reichb., var. *flavicornis*, Forster. Damp turf, Tiptree Heath, Essex N., v.-c. 19, May 9, 1912. Identified as above by Dr Gilbert (of Tunbridge Wells) in 1910.—G. C. BROWN. "No; the shape of leaves and stipules only sparsely fringed, point to *V. canina*, var. *ericetorum* (*V. flavicornis*, Smith, in part)."—E. S. GREGORY.

V. Riviniana, Reichb., forma *minor*. St. Lythan's Down, v.-c. 41, April 19, 1912.—H. J. RIDDELSDELL. "Yes."—E. S. GREGORY. "Right, I think; the rather large flowers are against its being var. *diversa*, Gregory."—E. S. MARSHALL.

Viola canina, L. Wood at 400 feet, Tidenham, v.-c. 34, May 9, 1912. It also grows on the chase, in open ground, at 600 feet.—

H. J. RIDDELSDELL. "This is probably the var. *pusilla*, Bab. of *V. canina*, L. The plant should be watched, and earlier and later examples taken."—E. S. GREGORY. "To those who wish to cite a definite name for this plant *V. canina*, Hayne, is certainly correct. The figure is good, and Hayne says Schrader intended to describe it under the name *ericetorum*, an intention he never fulfilled, so that it is straining citation to write *V. ericetorum*, Schrad., for a combination he never made. We may quite safely write *V. canina*, L. emend. Hayne, which is much earlier than some other names which have been suggested. The habitat for *V. canina*, 'in apricis,' cited by Linnaeus, eliminates the woodland species *V. sylvestris* and *Riviniana*, which Linnaeus, so far as synonymy goes, may have aggregated with this plant."—G. C. DRUCE.

Viola canina × *stagnina*. [Ref. No. 3753.] Woodwalton Fen, Hunts, v.-c. 29, June 5, 1912. Named on the spot by Mrs E. S. Gregory. The *stagnina*—parentage was very clear; perhaps the other factor is the var. *crassifolia* of *V. canina*, which seems to be the prevailing form in this locality. A very handsome hybrid.—E. S. MARSHALL. "Evidently an intermediate or hybrid between *V. canina* and *V. stagnina*."—E. S. GREGORY.

V. hirta, L., (?) var. *propera*, Gillot. Puckham Wood, v.-c. 33, April 10, 1912. A form which may belong to *inconcinna*, Briq., but seems nearer *propera*. I found also a small quantity of good *inconcinna*.—H. J. RIDDELSDELL. "We certainly have here the small leaves, large flowers with broad sepals characteristic of var. *propera*, but the branched underground stem denotes some admixture of *V. odorata*."—E. S. GREGORY. "I think this may pass, the sepals of my own specimens are about 2mm. wide."—G. C. DRUCE.

Viola epipsila, Ledeb. Quintrell Downs, near Newquay, West Cornwall, v.-c. 1, May and July 1912. This will probably be found to be as common in Cornwall as *V. palustris*. I have found it in both vice-counties.—C. C. VIGURS. "Correct."—E. S. GREGORY. "Yes; I so named the fresh specimens sent me by Dr Vigurs."—G. C. DRUCE.

Viola epipsila, Ledeb. [Ref. No. 4795.] Burghfield, Berks, May 1912. Flowers to supplement the fruiting plants sent last year. In this stage the plants are practically glabrous, and I was afraid the character which chiefly separates it from *palustris* had broken down, but I brought a few roots home and placed them in a cool house, when within a month the later leaves had the veins and peduncles hairy. I may add that I have also found *V. epipsila* near Omagh, in Co. Tyrone, and near Silchester, in N. Hants. Only *V. palustris* was noticed in Forfar, Perth E. and M., Dumfries, Linlithgow,

Kirkcudbright and Wigton.—G. C. Druce. "When sent to me from Burghfield in July 1911, this plant fulfilled all requisite characters of *V. epipsila.*"—E. S. Gregory.

Viola arvensis, Murr., var.——? Branston, Leics., v.-c. 55, Aug. 1912.—A. R. Horwood.

Viola——? Arable land, and also among rocky debris at summit of Sharpstones Hill, near Shrewsbury, v.-c. 40, Sept. 8, 1912. —J. C. Melvill. "My specimen is not perfect, but as far as I can judge it is *V. subtilis.*"—E. Drabble.

Viola——? [Reference No. 4940.] Frilford, Berks, in dry sandy soil, July 1912.—G. C. Druce. "*V. Déséglisei*, Jord."—E. Drabble.

Viola obtusifolia, Jord. Kenilworth, Warwickshire, v.-c. 38, Aug. 1912, and from garden ground, Lytham, W. Lancs., v.-c. 60, Sept. 1912.—H. J. and J. A. Wheldon. "Yes."—E. Drabble.

Viola——. [Ref. No. 4782.] Oxford, June 1912.—G. C. Druce. "*V. obtusifolia*, Jord.; remarkably fine."—E. Drabble

Viola, near *ruralis*, Jord. (?) Garden ground, Walton, S. Lancs., v.-c. 59, Aug. 1912.—J. A. Wheldon. "Yes; apparently an overgrown and not typical *V. ruralis*, Jord."—E. Drabble.

Viola——? [Ref. No. 4806.] Crowwell, Oxon, May 1912.—G. C. Druce. "Apparently upgrown *V. ruralis.*"—E. Drabble.

Viola——? [Ref. No. 5120.] Near Lacey Green, Sept. 1912.—G. C. Druce. "*V. contempta*, Jord."—E. Drabble.

Viola arvensis, Murr., var.——? Knipton, Leicestershire, v.-c. 55, Aug. 22, 1912.—A. R. Horwood. "*V. arvatica*, Jord."—E. Drabble.

Viola——? [Ref. No. 4821.] Moreton Green, Bucks, July 1912. —G. C. Druce. "*V. arvatica*, Jord."—E. Drabble.

Viola——? [Ref. No. 5244.] Sep. 1912. This handsome pansy was common in turnip fields and also among grass in the parish of Balgavies, Forfar. Mrs Corstorphine tells me it has a wide area in the district.—G. C. Druce. "*V. lepida*, Jord."—E. S. Marshall. "*V. Lejeunii*, Jord. But I have not the whole of a full grown plant." —E. Drabble.

Viola lepida, Jord. (?) Rocky limestone woodland near Carnforth, W. Lancs., v.-c. 60, Sep. 1912. Coll. J. W. HARTLEY and H. J. WHELDON; Comm. J. A. WHELDON. "Probably right; the perennial root is not shown in my plant."—E. S. MARSHALL. "Only part of a plant has been sent, but this appears to be *V. Lejeunii*, Jord."—E. DRABBLE.

Viola Curtisii, Forster, var. *Pesneaui*, Lloyd and Fouc. Sandhills, Walney Island, North Lancashire, v.-c. 69, Sep. 1912.—J. COMBER. "Yes."—E. DRABBLE.

"It must be understood clearly that the determinations of the pansies refer only to the actual specimens seen. Gatherings in the past have frequently been mixtures, and I have often found myself confronted in looking through herbaria with specimens bearing an Exchange Club determination which certainly was never given for the plant on the sheet."—E. DRABBLE.

Polygala——? Steep stony slope of Cranham Common, Painswick, v.-c. 33, July 1912. Leaves on barren branches remarkably broad. Perhaps *P. calcarea*, F. Schultz, which I have not gathered, however, so late in the year as this.—H. J. RIDDELSDELL. "*P. vulgaris, forma.* My specimen is very imperfect, most of the flowers having fallen, and the plant appears as if strangled by herbage, but the leaves are not opposite as in *serpyllacea* forms.—G. C. DRUCE and J. CRYER. "Material scrappy; I think that it is a straggling, few-flowered *P. serpyllacea*, but no fruit is present."—E. S. MARSHALL. "It *looks* like *P. vulgaris*, but my specimens only boast of one poor head of flowers, two buds, and no fruit! So what *can* one say?"—C. E. SALMON.

Dianthus deltoides, L. Limestone rocks, near Deganwy Castle, Carnarvonshire, v.-c. 49, July 9, 1912.—W. A. SHOOLBRED. Also sent from same place by E. S. MARSHALL.

Silene maritima, With., *forma.* Chesil Beach, v.-c. 9, July 1912. A form with pale yellowish calyx, mentioned in Pleydell's *Flora of Dorset.* There are also intermediates there between this and the ordinary form.—H. J. RIDDELSDELL.

Lychnis Preslii, Sekera. Plant from Tantallon Castle, Haddington, June 12, 1910.—Miss A. TROWER. "Yes; and I think a distinct species, the occurrence of which in this locality is remarkable. Late in August I visited the spot and saw a single plant on the edge of a cornfield. *L. dioica* was abundant in the vicinity, and although out of flower varied greatly in degrees of pubescence. Perhaps Miss Trower will grow *Preslii* from seed. I have a quite glabrous form

of *L. alba* sent me by Mr Chester from Northants in 1912."—G. C. DRUCE.

Cerastium tetrandrum, Curt., var. Burry Holm, v.-c. 41, June 1910. On this var. see *Report* 1910, p. 545. This supply is not quite so characteristic as the former.—H. J. RIDDELSDELL. "A form I think and not a variety of the polymorphic *tetrandrum*."—G. C. DRUCE. "This agrees very closely with my authentic sheet of *C. subtetrandrum*, Murbeck (apud Baenitz, *Herb. Europ.*, 1892) in habit, but is considerably more glandular; the species varies a great deal, and maritime sands increase the glands."—E. S. MARSHALL. "Typical *C. tetrandrum*."—J. A. WHELDON. "Capsule short and straight, very unlike that of var. *dunense* described in *Journ. Bot.* 17, 1913. The habit and size is remarkable, and I have not seen so robust *tetrandrum* before. There is a var. *majus*, Moris *Fl. Sard.* i., 267, 1837, but I do not know it."—C. E. SALMON.

Stellaria apetala, Ucria. Sandy places, St Martha's Hill, Guildford, Surrey, v.-c. 17, April 1912.—J. COMBER. "It exactly matches the description in Rouy and Foucaud's *Fl. de France*, iii., 230, of their var. *minor*, of which *S. Borœana*, Jord., is quoted as a synonym. Our coast-plant is, as a rule, larger and more straggling."—E. S. MARSHALL.

Stellaria neglecta, Weihe, var. *umbrosa*, Opiz. Particularly luxuriant in hedgerows between Meole Brace and Pulley, Salop, v.-c 40, May 1912.—J. C. MELVILL. "My plants have hairy peduncles and bluntly tubercled seeds."—G. C. DRUCE. "Yes; the plant with glabrous calyx and pedicels, and acutely tubercled seeds, which Opiz named *S. umbrosa*."—E. S. MARSHALL.

Arenaria tenuifolia, L., ? var. Wilbury Hill Gravel Pit, near Hitchin, Herts, June 8, 1912. Seems to differ from the type in having a glandular calyx, from var. *laxa*, Jord., in having 10 stamens, and from var. *hybrida*, Vill., in its smooth peduncle.—J. E. LITTLE. "These plants are very similar to those sent from Minchinhampton Common by Rev. H. J. Riddelsdell in 1909 (see *Report* 1909, 442), and my remarks on that gathering apply equally to this. Note that Boreau considers that *hybrida* should be glandular in the upper part, and that the fruiting pedicels should be 'dressés étalés.'"—C. E. SALMON. "Yes, *A. tenuifolia*, L., *Minuartia tenuifolia*, Hiern."—A. THELLUNG.

Sagina nodosa, Fenzl, var. *monilifera*. Askham Ironworks, v.-c. 69. Most of these plants were growing in the "rivet-holes" of flattened boiler-plates, the others in sandy ground. All, save the smallest, were produced naturally in these extremely draughty places. Very few

flowers were produced. Probably, judging from the crowded associations of very young plants, many fascicles are aided by the parent plant in their new start in life. The base of the ascending shoot becomes covered with sand, or with that and "slime," and then most of the fascicles on it take root. The smallest distributed were produced separately from the parent, *i.e.* from scattered fascicles. On November 2nd, I was able to send Mr Cryer some rooted fascicles, still attached to the parent shoots, so that the help given by the parent is beyond doubt.—D. LUMB.

Sagina ciliata, Fries, *forma*. [Ref. No. 678.] West Barnes Lane, Merton, Surrey, June 12, 1912. This differs from the usual form of *S. ciliata*, Fries, in that the sepals ultimately spread like those of *S. apetala*, L., with which species it grew. By the habit, outer sepals pointed, &c., this plant is *S. ciliata*, Fries, but the sepals, spreading at length, recalls *S. apetala*, L.—C. E. BRITTON. "The strongly ciliate leaves apparently indicate *S. filicaulis*, Jord., but I have no example for comparison."—J. A. WHELDON. "Surely under *apetala* and not *ciliata* by its sepals, &c."—C. E. SALMON. "Probably a form of *S. apetala*."—G. C. DRUCE.

Sagina Reuteri, Boiss. Sand dunes, Hightown, S. Lancs., v.-c. 59, Aug. 1912. A form with very spinose leaves, resembling *S. apetala*, var. *spinosa*, Fenzl. The short pedicels, and calyx not spreading (until after the capsules dehisce), appear to keep it separate from that.—J. A. WHELDON.

Spergularia rupestris, Lebel. Rolley, River Gannel, Newquay, West Cornwall, v.-c. 1, July 2, 1912.—C. C. VIGURS. "Yes; Rouy & Foucaud name it *(Fl. Fr.*, iii., 305) *Lebeliana*, because there is an earlier *S. rupestris*, Dietr., but as that is a South American *Arenaria* there is no adequate reason for changing Lebel's original name, even for his later *rupicola*."—G. C. DRUCE. "Of the four plants on my sheet, two are normal; the others are lax and straggling, with leaves twice as long, but the seeds are all alike. Why Rouy went out of his way to coin a new name *(S. Lebeliana)* I cannot understand."—E. S. MARSHALL. "Yes; our most beautiful species."—C. E. SALMON.

Spergularia rupestris, Lebel, var. *glabrescens*, Lebel. Headland, Newquay, West Cornwall, v.-c. 1, Oct. 1912. On dry cliffs.—C. C. VIGURS. "Although the leaves are glabrescent the rachis is glandular, but perhaps it may pass."—G. C. DRUCE. "I am glad to see this variety, which I had never been able to find; but the specimen is poor."—E. S. MARSHALL. "I suppose so, but my specimen is rather fragmentary."—C. E. SALMON.

Spergularia marginata, Kittel. Mud flats, Hayling Island, S. Hants., v.-c. 11, Aug. 1912.—J. Comber. "Yes; the *S. media*, Presl. In this the peduncles and calyces are glandular."—G. C. Druce. "I agree."—C. E. Salmon.

Spergularia marginata, Kittel. Penpoll Creek, River Gannel, Newquay, West Cornwall, v.-c. 1, Aug. 22, 1912. On wet mud banks. —C. C. Vigurs. "Yes; the typical glabrous plant the older name for which is *S. media*, Presl, and of Lebel *Revis*, p. 25, a trivial which has, however, been used for other species."—G. C. Druce. "Yes; a straggling form of the type."—E. S. Marshall and C. E. Salmon.

Spergularia salina, Presl. Near Cheviot River Gannel, Newquay, West Cornwall, v.-c. 1, June 7, 1912.—C. C. Vigurs. "The seeds are papillate, hence the var. *neglecta*. Rouy and Foucaud (*Fl. Fr.*) group the various forms of this polymorphic plant under *S. Dillenii*, Lebel *Rev. Sperg.* p. 27."—G. C. Druce. "This is practically glabrous and seems correctly named, yet it has the obviously papillate seeds that some authors ascribe to *neglectum*, Kindb. Syme distinctly states that his *S. neglecta*, *β salina*, Presl, should have 'seeds without papillae,' and Rouy remarks, under *S. salina*, Presl, 'graines seulement chagrinées.'"—C. E. Salmon.

Spergularia salina, Presl, var. *neglecta*, Syme. On sandy mud, Porth, Newquay, West Cornwall, v.-c. 1, May 19, 1912.—C. C. Vigurs. "Although the pedicels are glandular, the seeds are quite smooth (not papillose); I believe that it comes under the type."—E. S. Marshall. "This seems to agree with the description of the plant called '*S. neglecta*, *a genuina* (= *Lep. neglectum*, Kindb.)' by Syme. It complies also with Hooker's idea of the plant (*Stud. Fl.*). I have not seen Kindberg's type or original description and Rouy (and also Gürke) do not fall in line with our British handbooks as they make *L. neglectum*, Kindb. a synonym of *S. salina*, Presl."—C. E. Salmon. "My specimen has papillate seeds, and is therefore *neglecta*, and Mr Barton tells me his sheets of both this and the preceeding are *neglecta*."—G. C. Druce.

Spergularia [*diandra*, Boiss], var. *atheniensis*, H. and S. [Ref. Nos. 39, 41, 42.] Lerée, Guernsey, Aug. 13, 1912. Mr Druce says in lit. 'quite the same *Spergularia* as I got in Jersey in 1906, but in a place now denuded of plants on the foreshore. It is the Mediterranean *atheniensis* I well believe, or if not that, a new species, but it agrees very closely with an authentic specimen that I have gathered on the Grecian coast. It differs from *rubra* by its stipules and in the absence of the central rosette. The fruits are smaller than in *salina*.' Of the three Spergularias I have, numbered 39, 41,

42 ; Mr Druce passed 39 and 41 as *atheniensis*, and expressed doubt about 42. I have since compared these forms with the authoritative No. 590 De Heldreich *Herbarium Graecum Normale* in British Museum, and find my 39 agrees very closely in all respects, except that its growth is more compact and it is less densely and coarsely glandular-hairy. My 41 differs in growth, size of flower, fruit and seed, and length of pedicel, and is less glandular-hairy ; the leaves are scarcely 'mucronulate' and the cymes more leafy. Seeds of De Heldreich No. 590 as above, 15—18 : 3·3 mm. ; of my No. 39, 14 : 33 mm. ; of my 41 and 42, 35—42 : 33 mm. Another sheet in British Museum, De Heldreich *Herb. Gr. Norm.*, No. 831, *Spergularia campestris*, Kindb., has seeds 30—34 : 33 mm., and to this much of my No. 41 corresponds closely. (Kindberg, in his *Monograph*, gives *Lepigonum campestre* as synonymous with *Spergularia rubra*, var. *atheniensis*, Heldr. and Sart). I have a series of forms intermediate between my 39 and 42. For comparison ; seeds of *Spergularia salina*, Presl, var. c. *neglecta*, gathered in Guernsey measure 35—50 : 33 mm.—W. C. Barton. "Yes, this agrees with the description of *S. atheniensis*, Asch., in Rouy's *Fl. France.*"—C. E. Salmon. "Probably all these come under *atheniensis.*"—G. C. Druce.

Spergularia rubra, Presl. Par, v.-c. 2, Aug. 30, 1912. I doubt this being *rubra*, though sent under that name, as the stipules are not lanceolate and silvery white. My specimen collected there some years ago by Mr A. O. Hume is queried also. May it be *S. atheniensis*?—C. C. Vigurs. "I believe Dr Vigurs' plant to be *S. atheniensis.*"—G. C. Druce. "A more densely glandular form (from the very base) than any I have met with."—E. S. Marshall. "The shape and colour of stipules, &c., point to *S. atheniensis* rather than typical *rubra.*"—C. E. Salmon. "Matches very closely No. 39 of Mr Barton's."—J. Cryer.

Claytonia perfoliata, Donn. Abundant near Sibil Hedingham, Essex N., May 1912. Also seen near Colchester, and in Woolmer Forest, by the roadside, Hants S.—G. C. Druce.

Montia. In profusion on a bog on Chailey Common, Sussex, May 20, 1912. It does not appear to be mentioned in Dr Arnold's *Sussex Flora.*—A. Webster. "As far as I can see, the seeds agree in character with those described by W. H. Beeby (*Ann Scot. Nat. Hist.*, 1909, p. 104) for the plant he called *M. fontana*, L., ssp. *minor*, Gmelin, var. *β intermedia*, Beeby."—C. E. Salmon.

Montia fontana, L., var. *rivularis*, Gmel. I have preferred using the name *M. fontana*, L., in accordance with the *Lond. Cat.* instead of the arrangement in *Report* 1908, pp. 331—2, *i.e. M. verna*, Neck.,

var. *rivularis*, Gmel. I presume this is synonymous with the *Lond. Cat.* var. *major*, All. ?—G. C. Brown. "No; this is *M. verna*, Necker = *M. chondrosperma*, Fenzl, var. *rivularis* (Gmel. p.p.), with the seed of Beeby's *intermedia*. The Linnean species described as *M. fontana* in *Sp. Pl.*, so far as the references in *Flora Suecica* and *Fl. Lapponica* go refer to the plant afterwards named *lamprosperma* by Chamisso, which alone occurs in Scandinavia, and is the common plant of Scotland, and it is the plant of the Linnaean herbarium. Some of the synonyms added by Linneus in the *Sp. Pl.* may belong to the more southern plant. It may be remarked that Gmelin neither describes his plant as a variety or as a sub-species."—G. C. Druce. "This is *M. fontana*, L., ssp. *minor*, Gmelin, var. *intermedia*, Beeby."—C. E. Salmon.

Hypericum humifusum, var. b. *magnum*, Bast. Roadside, St. Andrews, Guernsey, Aug. 2, 1912. I gathered this variety in all parts of the island, but failed to find the type.—W. C. Barton. "Are the sepals sufficiently serrate for this variety?"—G. C. Druce.

Malva sylvestris, L., var. *acutiloba*, Celak. Par Harbour, East Cornwall, v.-c. 2, Oct. 1912. A well-marked variety, upright, 3 to 4 ft. high, leaves three or five lobed with long lobes, flowers rather smaller than usual.—C. C. Vigurs.—"Yes, I found this at Par in 1910, and Dr Thellung kindly identified it as Celakovsky's *acutiloba*, which I also gathered at Twyford in Berks in 1890."—G. C. Druce.

Geranium molle, L., var. *grandiflorum*, Vis. Hedge-bank, St David's, Fife, v.-c. 85, July 20, 1912.—M'T. Cowan, jun. "No; *G. pyrenaicum*, Burm. fil."—J. Cryer and G. C. Druce.

Geranium columbinum, L. Hedge-bank in lane near Colemore, near Ellesmere Town, Salop, v.-c. 40, July 3, 1912.—C. Waterfall. "Yes."—G. C. Druce.

Geranium Robertianum, L. Seedlings. Cult., Walton, S. Lancs., Aug. 1912.—J. A. Wheldon.

Geranium Robertianum, L., var. Chesil Beach, v.-c. 9, July 17, 1912. In compact roundish plants growing from a translucent yellow-brown tap root. Flowers small, anthers red, pollen golden. Plant hairy.—H. J. Riddelsdell. "The specimens lack properly dried flowers. It would appear to be a form of the aggregate *purpureum*, since the carpels are glabrous, but with more distant ridges than those of Mr. White's plant. It is probably the var. *minutiflorum* (Jord. *Pugill.* 39), since it is too hairy for *litorale*, and too compact for *intricatum*, Gren."—G. C. Druce.

Geranium purpureum, Vill., var. *genuinum*, R. and F. Limestone rocks, Leigh Woods, N. Somerset (first noticed there by Dr C. Moss), June 7, 1912, and Crantock, West Cornwall, June 25, 1912. These small-flowered forms vary conspicuously from the type, but it is usually difficult to fit them in with described varieties, and one feels sorry that they may not be left under an aggregate *parviflorum*. The Leigh Woods plant has the glabrous, deeply wrinkled carpels of *purpureum-genuinum*, though in other respects it might pass for *G. minutiflorum*, Jord., as understood by the Var botanists. The Cornish specimens do not exactly correspond, but I hardly think their characters differ more than might be expected from a more exposed situation close to the sea.—J. W. WHITE. "Yes, the true plant, with glabrous carpels and lower leaves, small flowers and yellow anthers."—G. C. DRUCE. "Rouy's *α genuinum*, for which he quotes *G. purpureum*, Vill., should, of course, stand as the type. Plant in good fruit, without flowers; upper part, including calyx, with many long, slender, gland-tipped hairs; ripe seeds, dark brown; carpels hairy, dull brown (Rouy describes them as 'rougeâtres' in his *genuinum*). If a form of *G. purpureum*, which I doubt, the fruit-character is rather that of *γ simile*, Rouy ('carpelles brunâtres')." —E. S. MARSHALL.

Erodium cicutarium, L'Hérit. [Ref. No. 35.] Sandy hedge-bank above the marshes, Flixton, Suffolk E, v.-c. 25, Sept. 21, 1912. —W. C. BARTON. "Seems very near *E. pilosum*, var. *vestitum*, Clav."—J. A. WHELDON.

Erodium pilosum, Bor., a. *glutinosum*, Clav. Autumnal form. Sand dunes, St Anne's, West Lancs., v.-c. 60, Sept. 1912; also from sand dunes, Ainsdale, S. Lancs., v.-c. 59, June 1912. The late examples of this plant have a very different appearance, owing to the long diffuse stems.—J. A. WHELDON.

Erodium cicutarium, L'Herit., var. c. *glandulosum*, Bosch. [Ref. No. 36.] Sandy coast, Grand Havre, Guernsey, Aug. 21, 1912. Also from Lithou Island, Guernsey, on sand among bracken. [Ref. No. 31.] Aug. 13, 1912. Also from Headon Hill, Isle of Wight, v.-c. 10. [Ref. No. 32.] Sept. 1, 1912.—W. C. BARTON.

Erodium cicutarium, L'Hérit. My Guernsey specimen No. 36 is not 'densely glandular.'—J. CRYER.

At present our knowledge of the British forms of *cicutarium* is chaotic. Rouy and Foucaud put *pilosum*, Jord. as var. a. of *E. bipinnatum*, Willd., itself subordinate to the aggregate *E. cicutarium*, Aiton, but the plant from St. Anne's, although glandular,

does not seem sufficiently so for the var. *glandulosum*, Bosch. The small plant from Ainsdale may possibly be referred to it, as might Mr Barton's plant from Lihou Island. Those from Headon Hill and the Grand Mare are less glandular.—G. C. DRUCE.

Erodium cicutarium, L'Hérit., var. *pimpinellifolium* (Sibth.) as a species. [Ref. No. 4819.] Stow Wood, Oxon, Aug. 1912. In some of the specimens the two upper petals had dark purple spots as in Sibthorp's type, which came from the vicinity. He based it on the *Geranium pimpinellaefolio*, Ray *Syn.*, 358, 1724. The petals were sometimes unspotted, even on the same plant.—G. C. DRUCE. "From the colour of the stigmas and the glandular sepals, I should consider Mr Druce's plant to be *E. praetermissum*, Jord. The carpel furrow of *E. triviale* is said in *Bab. Manual* to be 'very faint,' and in Corbière's *Fl. France* to be 'very marked.' There seems to be much confusion in naming these plants. According to Corbière, *E. triviale*, Jord., includes *E. pallidiflorum*, *E. Boraeanum*, and *E. parviflorum*, and has an eglandular calyx and marked carpel furrow. *E. praetermissum* differs chiefly in its glandular calyx and purple-violet stigmas."—J. A. WHELDON.

Erodium moschatum, L'Hérit., var. [Ref. No. 38.] Sandy coast, Grand Havre, Guernsey, Aug. 21, 1912. This dwarf plant is common on the west coast from Grand Havre southwards to Lerée. Mr Marquand told me that so far as he knew it had been passed over as *Erodium cicutarium*, of which I send dwarf plants from the same locality. The petals were exactly similar to those of the normal full-sized plant growing at Albecq. My Guernsey specimens of *Erodium moschatum* do not bear out Babington's *(Manual)* distinction *E. cicutarium*, 'beak hairy'; *E. moschatum*, 'beak downy.' I have found both hairy with little difference. I have not seen an authentic specimen of var. *minor*, Rouy and Fouc., but my No. 38 agrees well with their description, and seems probable from the habitat. In *Herb. Brit. Mus.* is a similar plant collected by Mr Marshall, [No. 2924.] April 1, 1905, on limestone rocks, Purn Hill, Bleadon. He remarks 'very glandular, not musk-scented, stamens (apparently) not bidentate at base.'—W. C. BARTON. "Agrees very well (by description) with var. *minor*, Rouy, *Fl. de France*, iv. 113."—E. S. MARSHALL. "Possibly the var. *minor*, Rouy and Fouc., *Fl. Fr.*, iv. 113."—G. C. DRUCE.

Erodium maritimum, L'Hérit. North coast, Guernsey, Aug. 8, 1912. Also a seedling plant, coast near Mont Cuet, Guernsey, Aug. 10, 1912.—W. C. BARTON. "Yes."—G. C. DRUCE.

Impatiens Noli-tangere, L. Marrington Dingle, v.-c., 40, July 24, 1912. Coll. Rev. W. BUTT, President of the Cotteswold Club. A

very difficult plant to dry. In plenty with *Inula Helenium*, *Hesperis*, and *Mimulus* in a locality which is first mentioned in Johnson's *Gerarde*, 446, where the plant is called *Persicaria siliquosa*. See *Journ. Bot.* 1895, 117 and 376. Mr Butt tells me the flowers bore no spots; but this seems no sufficient reason for making a variety.—H. J. RIDDELSDELL.

Impatiens parviflora, DC. Pusey Woods, Berks, June 15, 1912. Literally as Mr G. C. Druce says in his *Flora of Berkshire*, 1897, 'covering acres in Pusey Wood, where it was probably introduced with buckwheat used for pheasants' food.'—F. L. FOORD-KELCEY. "Yes."—G. C. DRUCE.

Impatiens parviflora, DC. Waste ground, Bank of Aire, altitude 200 ft., Aug. 1912. Has been growing here for sixteen years.—J. CRYER.

Euonymus europœus, L., with cream-coloured fruit. W. Guildford, v.-c. 17, Oct. 1912. Coll. Miss GARDEN. See *Journ. Bot.* 377, 1912, by Miss Armitage, who sent me the specimens now distributed. Comm. S. H. BICKHAM.

Acer Pseudo-Platanus, L. Seedlings. Millwood, Dalton-in-Furness, v.-c. 69, Sept. 18, 1912.—D. LUMB.

Ulex europaeus, L. Naphill Common, Bucks, Aug. 1912. These seedlings came up in immense quantities among the ashes from the extensive fire of the furze last year.—G. C. DRUCE.

Medicago falcata. A casual, which I had not noticed previously at St. Anne's, West Lancashire, v.-c. 60, occurred on the sandhills of Devonshire Road, July 13, 1912, and of which I can only send three examples.—C. BAILEY. "Yes."—A. THELLUNG.

Medicago sylvestris, Fries. Plant brought from Thetford, Suffolk, v.-c. 26, May 1911.—MISS A. TROWER. "Yes."—G. C. DRUCE.

? *Medicago media*, Persoon, = *M. falcato-sativa*, Rchb. Established many years on waste ground near Portishead Station, North Somerset, July-Aug. 1912. I have observed this plant many years and think it may be a hybrid. It flowers profusely, but produces fruit in very small quantity. There is but little evidence of *M. sativa*, save perhaps in the form of inflorescence.—J. W. WHITE. "In good flower, without fruit; matches *M. falcata* very well, with no appearance of *M. sativa*, so it can hardly be *M. varia*, Thomas Martyn = *M. sativa*, *media*, Pers. The flowers are pure, bright yellow."—E.

S. MARSHALL. "This plant may be, as Mr White suggests, *M. falcata* × *sativa*, though it cannot be very far from *falcata* itself, of which it has a general appearance, excepting the non-falcate pods—however, *ripe* pods are necessary to show this feature."—C. E. SALMON. "This is *M. falcata*, L. (not *M. media*, Pers.)"—A. THELLUNG.

Medicago minima, Desr. Sewage tip, near Bradford, v.-c. 64, July 11, 1912. This was the dominant *Medicago* this past season. The others present in less abundance being *M. denticulata*, Willd., also var. *apiculata*, Willd., *M. arabica*, Huds., *M. lappacea*, Desr., *M. laciniata*, Mill., and *M. tribuloides*, Desr. Wool introductions.—J. CRYER. "Dr THELLUNG suggests comparing it with var. *recta* (Desf.), Burnat."—G. C. DRUCE.

Medicago laciniata, Mill. Sewage farm, near Bradford, v.-c. 64, July 11, 1912. In abundance.—J. CRYER.

Melilotus alba, Desr. Askham Ironworks, v.-c. 69, July 18, 1912. I am unable to understand why the pods of this plant should be described as *acute* and those of *arvensis* as *obtuse*. When removed from the calyx these seem to me to be far more nearly circular in outline than those of *arvensis*, and it would seem therefore more *obtuse*.—D. LUMB.

Melilotus arvensis, Wallr. Askham Ironworks, v.-c. 69, July 18, 1912. These plants were growing in sand which had been burnt hundreds of times by molten iron. They reached a height of 7 ft., and low down had a diameter of 4 to 5 feet. I think it must have been the admixture of slag dust that had caused these plants to flourish so exceedingly. The 'skeletons' of the 1911 plants show that some of them overtopped 8 feet; this seems very remarkable, seeing that the summer of 1911 was such an abnormally dry one.—D. LUMB.

Trifolium repens, L. Waste ground, Askham, v.-c. 69, Aug. 9, 1912.—D. LUMB. "Yes, the form with foliaceous calyces called var. *phyllanthum*, Seringe, in DC. *Prod.*, ii., 199."—G. C. DRUCE.

Lotus hispidus, Desf. Lancresse Common, Guernsey, Aug. 8, 1912.—W. C. BARTON.

Astragalus glycyphyllos, L. Wood side, Whatfield, W. Suffolk, v.-c. 26, June 27, 1912.—G. C. BROWN.

Ornithopus pinnatus, Druce. In cart ruts, Lancresse Common, Guernsey, Aug. 22, 1912.—W. C. BARTON.

Vicia (?) *angustifolia*, L. Waste ground, Askham, v.-c. 69, Aug.-Oct. 1912. The plants from which these pods were gathered have many of the attributes of *Vicia sativa*. The seeds, however, are always black, and so far as I have been able to make out, by opening pods at different stages, no spotted stage is included in their development. Although named *angustifolia*, the seeds seem much less spherical than those of that plant; they are larger, and the hilum is not the same. It is to be hoped that some members will cultivate them and report the results.—D. LUMB.

Vicia angustifolia, L., var. ——? On old railway bank near Hopetown, v.-c. 85, July 1912. I have not met this variety before in which the flowers are *solitary*, but the calyx is *split by the pods;* in the var. *segetalis*, Koch, the flowers are in pairs.—M'T. COWAN. "Difficult to name, being in fruit only. It seems to be what we reckon as the type (*V. segetalis*, Thuill.), though the pods are solitary." —E. S. MARSHALL. "Is var. *segetalis*, Koch. The seeds are 3.5 mm. in diameter."—J. A. WHELDON. "Is *V. angustifolia*, Reich."—A. THELLUNG.

Lathyrus tuberosus, L. Askham Ironworks, v.-c. 69, July and Aug. 1912. These plants, like those of *Melilotus alba*, *M. arvensis*, *Poa compressa*, *Bromus japonicus*, *Coronopus didymus*, and *Lepidium ruderale* no doubt have been directly introduced from the continent. Not one of them is to be found elsewhere in the neighbourhood.—D. LUMB. "Yes, and as an Alien new to 69."—G. C. DRUCE.

Rubus idaeus × *sublustris*, Lees. "The Moors," Alphamstone, Essex N., v.-c. 19, July 4, 1912.—G. C. BROWN. "The one sheet now sent seems to be *idaeus* × *caesius*. Another sheet (or sheets?) forwarded to me some weeks ago by Mr Brown (I suppose with same locality and date) looked like *idaeus* × *sublustris*. Possibly both hybrids occur in the locality, and may have been collected by Mr Brown for distribution."—W. M. ROGERS.

Rubus fruticosus, L. Seedlings. Askham Ironworks, v.-c. 69, Aug. 16, 1912.—D. LUMB. "I can suggest no segregate name for these little seedlings."—W. M. ROGERS. "These seedlings probably belong to group *Koehleriani*; as an aggregate, *R. rosaceus*, Wh. and N., may be suggested, or perhaps rather *R. dasyphyllus*, Rogers, which is more frequent in that part of England."—E. S. MARSHALL.

Rubus pulcherrimus, Neum. [Ref. No. 22.] Lane, Stanway, Essex N., v.-c. 19, July 24, 1912.—G. C. BROWN. "Correct."—W. M. ROGERS.

Rubus lentiginosus, Lees. [Ref. No. 343.] Rocky ground at Capel Curig, among low bushes on the ascent to Moel Siabod, v.-c. 49, July 11, 1912. On specimens submitted to Rev. Moyle Rogers, he wrote: 'Good *R. lentiginosus*, Lees, practically identical with Lees' small specimen of it from Aber Valley, now in my herbarium. I should not be surprised if it is identical with Lees' type specimen now in the *Herb. Bab.* at Cambridge, collected by him on the rocky ground at Capel Curig among low bushes on the ascent to Moel Siabod, Aug. 1849.'—S. H. Bickham. "Correct."—W. M. Rogers.

Rubus mucronatus, Blox. Ditch bank, Newton Lane, near Chester, v.-c. 58, July 25, 1912.—C. Waterfall. "Yes; apparently a shade grown state."—W. M. Rogers.

Rubus ericetorum, Lefv., var. *cuneatus*, Rogers and Ley. Abernant Park, Aberdare, v.-c. 41, Aug. 11, 1912. A form I know well.—H. J. Riddelsdell. "Correct."—W. M. Rogers.

Rubus serpens, Weihe. Twelve O'clock Drive, Brandon, July 1912. Seems not hitherto observed in Warwickshire. — L. Cumming. "Correct."—W. M. Rogers.

Geum urbanum, L. Seedlings. Railway-side, Askham, v.-c. 69, Aug. 24, 1912.—D. Lumb.

Potentilla mixta, Nolte (*P. reptans* × *procumbens*). Peat moor, Ashcot Road, North Somerset, Aug. 6, 1912.—J. W. White. "Looks right; but my material is too poor for certainty."—E. S. Marshall.

Potentilla suberecta, Zimm. (*P. procumbens* × *sylvestris*). On the peat of Edington Moor, North Somerset, Aug. 7, 1912.—J. W. White. "Yes; the *P. erecta* × *procumbens*."—G. C. Druce. "I agree."—E. S. Marshall.

Potentilla erecta, Hampe × *procumbens*, Sibth. Heathy ground, close to sea, amongst *Erica*, *Rosa spinosissima*, &c., at Mead End, Hordley, Hants, July 27, 1912.—J. C. Melvill "Probably so; nearer *procumbens* in foliage, but the general appearance is quite intermediate."—E. S. Marshall.

Acaena Sanguisorbae, Vahl. I found this native of Australia and New Zealand growing on a rocky bank of the Tweed for some 300 to 400 feet. It has become quite established, rooting as it does from the nodes of its runners, and is increasing rapidly. The fruits teem in New Zealand wool. They are called there by the natives Bidi-bidis, and give a red stain to the wool. This is

one of many spots where it grows by Tweedside. ? V.-c. 79, Oct. 5, 1912.—I. M. Hayward. "Dr Thellung suggests comparing these specimens with the sub-species *nova zelandiae* (Kirk), Bitter."—G. C. Druce.

Poterium polygamum, Waldst. and Kit. Fallow field on chalk, Royston, v.-c. 20, July 4, 1912. This is larger, and flowers a month or three weeks later than the common *P. Sanguisorba*. When the specimens were collected, July 4, *P. Sanguisorba* was quite over; in only a very few cases were fruits even to be found.—R. S. Adamson. "Is var. *platylophum*, Druce = *P. platylophum*, Jord." — J. A. Wheldon.

Rosa ——? [Ref. No. 786.] By the Beverley, Coombe, Surrey, July 25, 1912. This rose, whilst it is not quite so glandular as my No. 838, is, I believe, the same form.—C. E. Britton. This, by its hairy leaflets, connects the last gathering with the plant placed by Dingler to his unpublished name of *R. tomentella*, var. *anonyma*, which he considers to be a form of *R. caryophyllacea*, Chr. (see p. 37, *List of Brit. Roses*). Though plants with glabrous and with pubescent leaflets are very rarely classed together by rhodologists, there is little doubt about the close affinity between Mr Britton's Nos. 786 and 858, but whether they are better placed in the *Scabrata* sub-group of group *Canina* or in group *Tomentella* is open to question.—A. H. W.-Dod. "Styles thinly hispid; fruit globose. Under *R. inconspicua*, Déségl., as defined by Wolley-Dod in *Journ. Bot.*, 1911, *Suppl.*, p. 19."—E. S. Marshall.

Rosa ——? [Ref. No. 838.] Open ground, Malden, Surrey, Aug. 19, 1912. I believe this is identical with the plant referred to by Major Wolley-Dod, in his *List of British Roses*, under *R. Beatricis*, Burn. and Gremli. Major Wolley-Dod may possibly be right in hesitating to refer this rose to the *Rubiginosæ*, but it can hardly be placed in his group of *Canina*, if due regard is paid to the hairy mid-ribs of the leaflets. Besides the possession of setæ below the inflorescence, this rose is remarkable for the glands (most prominent in the living plant) on the lower surface of the leaflets being not confined to the mid-ribs and principal veins, but scattered all over the surface.—C. E. Britton. "Both these roses seem to me to belong to the same group as the Ashton rose sent to the Club last year by Mr Druce under the name of *R. caryophyllacea*, Chr. *forma* (see note in last year's *Report*, p. 87). To it also belong roses distributed by the late Rev. Mr Ley, from Catsworth and one or two other places, under the name of *R. Borreri*, Woods, var. I consider Mr Ley's diagnosis as correct, and that both the above and the others I have mentioned form a group of variations belonging to *R. Borreri*, Woods (*R. tomentella*, Lém.). Dr Dingler

associated the Catsworth plant to a group which occurs in Rhenish Bavaria, and which he has named provisionally *R. tomentella*, Lém., var. *anonyma*. From Dr Dingler I have received a fine series of var. *anonyma*. There are very considerable differences amongst the different specimens, especially as to the form of the leaves, but in spite of these differences I am disposed to agree with him in considering them as one group. One or two of his forms approach pretty closely the British forms above mentioned, and perhaps until the whole group has been further studied in both countries, and the results compared, we may call ours also in the meantime *R. Borreri*, Woods, var. *anonyma*."—W. BARCLAY. "This seems to be an extreme form of the plant referred to under *R. Beatricis*, Burn. and Geml., on p. 21 of my *List of British Roses*. I believe Prof. Dingler suggested some other name for it, but I am writing away from my herbarium and notes, so have only my memory to guide me. These specimens have many of their leaflets as glandular beneath as in the *Micranthae*, with which the *Scabratae* form a connecting link, but the aciculate flowering branches are unusual for either sub-group, though similar ones are occasionally found in otherwise very different specimens. I can give no definite name to Mr Britton's plant."—A. H. W.-DOD. "Near the Coombe plant; fruits not so round, but they appear scarcely separable."—E. S. MARSHALL. "No flowers. I think both these come under my *Rosa Rothschildii* (see *Report* 1912, pp. 157-159), notwithstanding their more spherical fruit, and slightly more hairy mid-rib."—G. C. DRUCE.

Rosa involuta, Sm. *forma* = *Rosa pimpinellifolia* × *tomentosa*. June 24, Aug. 1, Oct. 1, 1912. In each sheet I enclose a specimen grown in a garden for fifteen years and one in the wild state about 50 ft. higher up. The wild one seldom blooms, being in a shady spot, and it is gradually dwindling and dying out. The flower is larger and solitary, not a cluster, as it is under cultivation, where the plant becomes a large and beautiful bush.—I. M. HAYWARD. "I have seen a number of specimens of Miss Hayward's rose, received from herself, and consider it as the hybrid *R. pimpinellifolia* × *tomentosa* (*omissa* group). The *omissa* group is the prevailing form of *tomentosa* in Selkirk. The leaves of the Selkirk hybrid are much less hairy than in most Scottish forms of the same rose."—W. BARCLAY. "Yes, a form of this hybrid with thinly hairy leaflets, which, for those who prefer a segregate name, may be placed under *R. Sabini*, Woods."—A. H. W.-DOD. "Upon the whole, I am disposed to think this *R. mollis* × *spinosissima*, though the pedicels are rather long for that hybrid."—E. S. MARSHALL.

Rosa mollis × *spinosissima* (*R. Sabini*, Woods). Near Roley Bridge, Westmorland, Aug. 7, 1912. Though I have labelled these specimens as above, I do not mean it to be inferred that I think

the parentage to be derived in part from *R. spinosissima*, L., as a segregate. I only saw one bush of the aggregate in the neighbourhood, and did not stop to see which segregate it belonged to. The other parent is more likely to be *R. mollis* than *R tomentosa*, as the former is much the more frequent species. The hybrid is abundant and constant. It seems to be nearer the form *R. Sabini* than *R. Doniana*, and is certainly not *R. gracilis*, which was founded partly on specimens from this locality.—A. H. WOLLEY-DOD. "This is no doubt a form of *R. involuta*, Sm. There can be no question as to one parent being *R. spinosissima*, L., but from the specimen before me I could not say whether the second parent is *R. mollis*, Sm., or a form of *R. tomentosa*, Sm. But as Major Wolley-Dod saw the bush, he is in a much better position to decide as to the second parent than I am, and therefore I accept his diagnosis That does not mean that I consider *R. Sabini*, Woods, as identical in most cases with *R. mollis* × *spinosissima*."—W. BARCLAY. "Undoubtedly."—E. S. MARSHALL.

Pyrus communis, L., b. *Achras*, Gaertn. By the river at Llandaff, v.-c. 41, Aug. 30, 1902. No fl. or fr. seen, but probably rightly so named.—H. J. RIDDELSDELL.

Pyrus communis, L., var. *Achras*, Gaertn. Radley Wood, Berks, May 1912.—G. C. DRUCE.

Pyrus Aucuparia, Ehrh. Seedlings. Millwood, Dalton-in Furness, v.-c. 69, Sep. 30, 1912.—D. LUMB.

Pyrus minima, Ley. Craig Cille, v.-c. 42, Aug. 21, 1906. These specimens, of Mrs Ley's collecting, are sent for the benefit of members who have joined the Club of recent years.—H. J. RIDDELSDELL.

Pyrus Aria, Ehrh., *forma* with incise-lobate, very plicate leaves. Foot of Cooper's Hill, v.-c. 33, July 1, 1912. Perhaps var. *incisa*, Reichb.—H. J. RIDDELSDELL. "Hardly differs from what we regard as the type."—E. S. MARSHALL.

Pyrus latifolia, Syme, var. *decipiens*, N.E. Br. Leigh Woods, N. Somerset, Aug. 22, 1905. Coll. A. Ley. Hedlund calls this form '? *Sorbus Mougeoti*, Soy-Will. subsp. *anglica*, Hedlund × *S. latifolia*, Syme, nearer the former.'—H. J. RIDDELSDELL.

Crataegus monogyna, Jacq., var. *leiocalyx*, Druce. [Ref. No. 4860.] Also [Ref. No. 4907] with one style, tube glabrous. Twinstead, Essex N., May 1912. The older name under *monogyna* is var. *glabrata*, Sonder, *Fl. Hamb.* p. 265, 1851. If Engler's *Pflanzenreich*

be followed we must write it *Mespilus monogyna*, Jacq., var. *glabrata*, Sond. In some of the *Crataegi* I have intentionally dried the leaves and flowers only, since in the Herbarium they are, when attached to the woody branches, so quickly destroyed by insects.—G. C. DRUCE.

Cratægus monogyna, Jacq., var. *glabrata*, Sond. Hillside, and frequent, Crynant, v.-c. 41, May 19, 1912. I had never detected this form with glabrous calyx in Glamorgan until this date, but have found an odd plant or two since near Llandaff. Perhaps it is an upland form?—H. J. RIDDELSDELL. "But my specimen has not a glabrous calyx tube and is not therefore *glabrata*, Sonder."—G. C. DRUCE.

Cratægus monogyna, Jacq., var. *laciniata*, Wallr. [Ref. No. 2.] Butchers Green, Stanway, Essex N., v.-c. 19, May 21, 1912.—G. C. BROWN. "Not very good *laciniata*, the leaves should have two deep sinuses on either side, and the upper part of each segment should be rather deeply toothed."—G. C. DRUCE.

Cratægus monogyna, Jacq., var. *kyrtostyla*, Fingerh. [Ref. No. 1.] Roadside, Stanway, Essex N., v.-c. 19, May 21, 1912.—G. C. BROWN. "No; Fingerhuth says of his species, not variety, 'calycibus hirsutis': these are glabrous; moreover, *kyrtostyla* is practically synonymous with *monogyna* except for the bent style, an inconstant character of trifling importance, and in these specimens some of the styles are nearly straight."—G. C. DRUCE.

Cratægus monogyna, Jacq., var. *kyrtostyla*, Fingerh. Colley Hill, Reigate, May 17, 1912. Beyond being rather more hairy on the foliage, this agrees well with Fingerhuth's description and figure of *Cratægus kyrtostyla* in *Linnæa* (1829). I think it will be noticed that the style, besides being bent or curved near the summit, is rather longer than that of *C. monogyna*. Calyx villous.—C. E. SALMON. "Even on these specimens there are many styles which are straight or are only slightly bent. Some good botanists only treat *C. kyrtostyla*, Fingh., as = *C. monogyna*, Jacq."—G. C. DRUCE.

Cratægus monogyna, Jacq. (?), var. *splendens*, Druce. Hedge, Netherton, Ross, v.-c. 36, Oct. 2, 1911. Fruit much larger than usual. Perhaps the form is to be regarded as an intermediate between type and variety.—H. J. RIDDELSDELL. Also from cliffs near Redhead, Forfarshire, v.-c. 90, N.C.R., Sept. 8, 1912. [Ref. No. 901.] R. and M. CORSTORPHINE, in excursion with the British Association. "Yes; Mr. Corstorphine's specimens, which I saw fresh in Forfarshire, are practically correct; the Netherton specimen

is scarcely so typical."—G. C. DRUCE. "Only one Forfarshire specimen sent."—J. CRYER.

Cratægus monogyna × *oxyacanthoides*? [Ref. No. 4820.] Twinstead, Essex N., May 1912. Veins recurved, styles 1 and 2, calyx glabrous.—G. C. DRUCE. "Probably right enough; but mere scraps, of little use for herbarium study."—E. S. MARSHALL.

Cratægus monogyna × *oxyacanthoides*? [Ref. No. 4844.] Twinstead, Essex N., May 1912. Pedicels hairy, veins recurved, styles 2. Probably the hybrid.—G. C. DRUCE.

C. monogyna, Jacq., var. [Ref No. 5233.] Stow Wood, Oxford, Aug. 1912.—G. C. DRUCE.

Cratægus Oxyacantha, L. (*C. oxyacanthoides*, Thuill.) [Ref. No. 748.] Hedge in fields near North Cheam, Surrey, July 11, 1912. A form of this hawthorn with the leaves more cut up than usual. Perhaps Mr Druce can furnish a name.—C. E. BRITTON. "Not typical *oxyacanthoides* by any means, since although two styled, the veins of the lower lobes mostly curve outwards, and the leaves are of a dull green. There are no flowers, but I believe it is either a hybrid or more probably a form of *monogyna*. With regard to the name *C. Oxyacantha*, L., I may add that the specimens so labelled in *Herb. Linn.* are all *monogyna*. The leaf-cutting is unusual, and I should like to see flowering specimens."—G. C. DRUCE.

Crataegus oxyacanthoides, Thuill., var. *eriocalyx* (Freyn), Druce. [Ref. No. 4845.] Twinstead, Essex N., May 1912. Herr Freyn named similar specimens *C. Oxyacantha*, L., var. *eriocalyx*.—G. C. DRUCE. "Not in fruit; apparently a clerical error for var. *eriocalyx*, Druce, as the calyx-tube is villous. No good leaf-material. I cannot help thinking that too many slight 'varieties' are alleged."—E. S. MARSHALL. "My label is '*eriocalyx*.'"—J. CRYER.

Saxifraga groenlandica, L. [Ref. No. 351.] Origin, summit of Mt. Brandon; cult., Sedbury, Co. Kerry, May 7, 1912.—S. H. BICKHAM. "I have growing two very distinct, densely caespitose plants from this station, which appear to be good species; they have not yet flowered in cultivation, but I believe one of them to be the same as this, which is the *S. groenlandica* of Engler's *Monograph*. Unfortunately there is no specimen in *Herb. Linn.* The Spanish *S. groenlandica*, Lapeyrouse, non Linn. (*S. Tratiana*, F. Schultz) is clearly different; true *S. groenlandica*, according to Engler, only occurs in the Harz mountains, British Isles, Iceland, Greenland, and Labrador. Dr Moss recently wrote to me that Ostenfeld considered *S. groenlandica*

a synonym of *S. decipiens*, Ehrh., and our *S. hirta* and *S. Sternbergii* forms of *S. decipiens* (this, I am convinced, is a mistake). In *S. decipiens* the leaf-segments are *blunt*, not pointed; Engler makes both *S. caespitosa*, L., and *S. groenlandica*, L., varieties of it, but he was young when his book was published forty-one years ago, and both are, I believe, specifically distinct."—E. S. MARSHALL.

Saxifraga sponhemica, Gmel., var. ? [Ref. No. 3713.] Cwm Idwal, Carnarvon, v.-c. 49, June 26, 1912. Bright green; usually a neat, compact plant. Flowers as a rule rather small, creamy white. I do not yet know of any precise name for this striking form, which also grows on the Snowdon range. Associated with *S. hypnoides*, L.; various connecting links occur, probably of hybrid origin.—E. S. MARSHALL.

Parnassia palustris, L., var. *condensata*, Travis and Wheldon. Sand dunes, South Lancashire. Flowers, Freshfield, Aug. 1912; fruit, Birkdale, Sep. 1912.—J. A. WHELDON. (vide *Journ. Bot.* 1912, p. 254). "I gathered this, still more dwarfed, in 1886, at Keiss Links and on cliffs near Wick, Caithness; then and still it seems to me a coast-*state*, due to local conditions, rather than a valid variety."—E. S. MARSHALL.

Ribes rubrum, L., var. No. 1. By River Ely below St. Fagan's, in a wood, v.-c. 41, May 1, 1912. Not quite so thickly hairy as No. 7, but the spikes show a tendency to be less drooping.—H. J. RIDDELSDELL. "Var. *petraeum*, Sm. Racemes pubescent, leaves hairy beneath, glabrous above. No. 2 is the same form."—E. S MARSHALL. "Are not No. 1 and No. 2 the var. a. *Bromfieldianum*, Syme, *E.B.* iv., 44? Compare the description."—G. C. DRUCE.

Ribes rubrum, L., var. No 2. Wood by R. Ely, below St. Fagan's, v.-c. 41, May 1, 1912. Only slightly differing from No. 1 in hairiness, etc.—H. J. RIDDELSDELL.

Ribes rubrum, L., var. No. 5. One plant in middle of small wood, Cwrt Colman, Bridgend, v.-c. 41, May 1912. Much hairier and greyer than the other forms sent. In the garden of Cwrt Colman, half a mile away, were very similar plants, none of which however showed teeth like those of these leaves. Still very probably an escape. Spikes much less drooping than in the other forms.—H. J. RIDDELSDELL. "Probably var. *Smithianum*, Syme."—G. C. DRUCE.

Ribes rubrum, L., var. No. 7. By R. Taff, Llandaff, v.-c. 41, April 29, 1912. Spikes of fruits considerably hairy, as are also the leaves, especially below. But I cannot assign it to any named variety.—H.

J. RIDDELSDELL. "Under var. *petraeum*, Sm., I believe; leaves thinly hairy beneath; racemes glandular-pubescent."—E. S. MARSHALL. "Comes under var. *Bromfieldianum*, Syme. The leaves are nearly glabrous above."—G. C. DRUCE.

Sedum Fabaria, Koch. [Ref No. 4910.] Tubney, Berks, July 1912.—G. C. DRUCE.

Sedum Drucei, Graebner. [Ref. No. 5248.] Besilsleigh, Berks, Aug. 1912. See *Report* 1912, pp. 160-162. Flowers shall follow next season.—G. C. DRUCE.

Sedum rupestre, L. Limestone crags, The Leete, Flintshire, v.-c. 51, July 22, 1912.— C. WATERFALL.

Callitriche palustris, L. [Ref. No. 146.] Stream, Ouchterlony, Guthrie, v.-c. 90, N.C.R., Aug. 15, 1908.—R. and M. CORSTORPHINE. "Yes, the restricted *C. vernalis*, Kuetz., and a new county record."—G. C. DRUCE. "Only one specimen sent."—J. CRYER.

Callitriche —— ? Silversprings, Kimble, Bucks, July and Sept. 1912.—F. L. FOORD-KELCEY. "No fruits present; probably *C. verna*."—C. H. OSTENFELD. "The only fruit on my sheet has keeled (not winged) lobes, and long, loosely reflexed, persistent styles; these characters point to *C. polymorpha*, Lönnr. The habit is that of a large-leaved *C. stagnalis*."—E. S. MARSHALL. "On the specimen sent I can find no fruit, and it is essential in the genus (except the *antumnalis* section) to have fruit to safely decide. Still, by the arrangement of the leaves, their structure, &c., I think this is *C. obtusangula*, Le Gall., but such specimens are never quite satisfactory."—A. BENNETT. "Probably *C. vernalis*, but it is sterile, and fruit is necessary for determination in this section."—J. GROVES. "I have known this plant in the above station for some years. I have never obtained ripe fruit, but from its general appearance I strongly suspect it may be *C. polymorpha*, which is now believed to be a hybrid of *stagnalis* and *intermedia*."—G. C. DRUCE.

Callitriche autumnalis, L. Marlee Loch, Perthshire, v.-c. 89, Aug. 1911.—M'T. COWAN, jun. "Yes, the ordinary form of the species."—A. BENNETT.

Callitriche truncata, Guss. Running stream, Grande Mare, Guernsey, Aug. 16, 1912.—W. C. BARTON. "Yes, the plant recorded as *truncata*, Guss., which I gathered in this locality where it is always barren, but my Lancresse specimens show peduncled fruit, and they probably belong, with the Westerham Kentish specimens, to var.

occidentalis (Rouy as a race), which is the plant of Western France." —G. C. DRUCE. "No properly developed fruit but the species is of course unmistakable. It apparently requires still water to fruit at all freely."—J. GROVES.

Epilobium hirsutum, L., ♀ × *E. montanum*, L., ♂. Artificial hybrid, produced in July 1909 by emasculating flowers of *E. hirsutum*, L., and pollinating from *E. montanum*, L., insects being excluded by means of paper bags. Both parents were grown under observation in a garden at Tewkesbury, in which also the hybrid has been cultivated, 1910-12. During these three seasons the plant has varied somewhat in vegetative characters, but the specimens distributed represent the most abundant form. Long runners are not produced, the plant being propagated by close-growing rosettes. Another character of *E. hirsutum*, viz., the possession of long simple hairs, is also recessive in the hybrid (compare *E. hirsutum* × *E. tetragonum*, distributed 1910). No perfect flowers are ever produced, the nearest approach being a single bud which protruded a four-lobed stigma in 1912. Most of the flowers remain minute, and dry up without opening; ovary, sepals, stamens, style and stigmas, are all present in a rudimentary condition. This is the most extreme case of sterility that has so far been observed in an *Epilobium* hybrid. It is clear that the first generation hybrid is the only one that can exist.—R. H. COMPTON. "Here the general appearance and foliage show good evidence of both parents; the flowers are small and deformed, as I have frequently observed in natural garden hybrids. The few wild examples of this cross that I have seen have large, showy petals."—E. S. MARSHALL.

Epilobium hirsutum, L., ♀ × *E. parviflorum*, Schreb., ♂. Artificial hybrid, made 1911, Tewkesbury, July 1912. This artificial hybrid was produced in 1911, both parents as well as the hybrid being grown in a Tewkesbury garden. The plants have the type of clothing found in *E. parviflorum*, viz., long simple hairs throughout, mixed with shorter clavate hairs in the inflorescence. There are no long runners such as *E. hirsutum* possesses. The flowers are somewhat smaller than those of *E. hirsutum*, but have the petals coloured as in that parent. The pollen is abortive, but the ovules are (at least in part) capable of fertilisation, so that insect visits produce some capsules containing a few good seeds; and seed is set on pollination from either parent.—R. H. COMPTON. "Just like wild specimens. Though the species are so often associated, I have seldom found this hybrid."—E. S. MARSHALL.

Epilobium montanum, L., ♀ × *E. parviflorum*, Schreb., ♂. Artificial hybrid, produced in 1911, both parents as well as the hybrid being

grown in a Tewkesbury garden. Fourteen plants were obtained in the first generation, all being uniform except for a slight variation in colour of flowers. Good pollen is produced, and long capsules are formed, these however containing a high proportion of abortive seeds. Doubtless the second and subsequent generations will be very multiform.—R. H. COMPTON. "A good intermediate."—E. S. MARSHALL.

Circaea lutetiana, L., var. [Ref. No. 4760.] Lacey Green, Bucks., growing in rich deep leaf-mould, in shelter and partial shade, hence its small size is remarkable. Sep. 2, 1912.—G. C. DRUCE. "A small state of var. *ovalifolia*, Lasch., in *Linnaea*, 2, p. 46 (leaflets truncate or rounded at the base), I suppose. It looks starved."—E. S. MARSHALL

Circaea. Lower Faldonside, near Galashiels, alt. 330 feet, v.-c. 79, Aug. 1, 1912.—I. M. HAYWARD. "Is *C. lutetiana*, L."—C. H. OSTENFELD. "Leaves dull, thin; pedicels ebracteate. I think that this, also, is var. *ovalifolia*, Lasch., more luxuriant."—E. S. MARSHALL.

Helosciadium nodiflorum, Koch, var. *vulgare*, F. Schultz. Ditch between Hull Road and Crosby, S. Lancs, v.-c. 59, July 11, 1911.—J. A. WHELDON. "The *Apium nodiflorum*, Reichb. fil."— G. C. DRUCE.

Apium nodiflorum, Reichb. fil., *forma*. Ditch, Fairwater, v.-c. 41, Aug. 14 and 20, 1912. It seems very doubtful if any of the characters usually relied upon for the diagnosis of the varieties (*A. repens* is a good species, as the fruit shows) *e.g.* length of ped. of umbel, rooting of stem, shape of leaflet, involucre, &c., are of any value for the purpose; one form changes at once into another according to variation in exposure, and two different forms may come from one root. The present form is very near *ochreatum*, DC., except in size; but it is impossible to deny its right to go to *vulgare*, Schultz, in many respects.—H. J. RIDDELSDELL.

Ammi majus, L. Cult., Colchester, Aug. 7 and 10, 1912. Grown from seed of wild origin received from Dr E. G. Gilbert in 1911. They are rather drawn out from being sown too thickly.—G. C. BROWN. "The var. *serratum*, Mutel. = *genuinum*, Gren. and Godr."—A. THELLUNG.

Carum segetum, Benth. and Hook. fil. Great Wymondley Road, Hitchin, Herts, Aug. 24, 1912.—J. E. LITTLE.

Myrrhis Odorata, Scop. Not knowingly introduced in a wood on limestone hill, Highlands, Amberley, Glos. W., May 16, 1912.—

F. L. Foord-Kelcey. "A new county record for 34, but probably an alien."—G. C. Druce.

Chærophyllum aureum, L. Banks of the Teith, Callander, W. Perth, July 1912. See paper by Mr G. C. Druce *(Journ. Bot.*, April 1911). and also *Bot. Ex. Club Report*, 1911, p. 97. Happening to be at Callander, I collected a few specimens which may be acceptable to the club. Like Mr Druce, I found the plant abundant over a considerable area in meadows by the Teith.—A. Wilson.

Anthriscus Cerefolium, Hoffm., = *Cerefolium sativum*, Besser. Slopes of Edgehill, Warwickshire, June 1912. A new county record; doubtless an escape from old cultivation.—G. C. Druce. Also under a wall, on a very high bank overhanging the river at Ross, v.-c. 36, June 9, 1912. In great quantity, strongly established.—H. J. Riddelsdell.

Seseli Libanotis, Koch. Chalk pit, Cherry Hinton, Cambs., Sep. 1910.—E. Foord-Kelcey.

Daucus gummifer, All. Close turf, exposed, Port Soif, west coast, Guernsey, Aug. 7, 1912.—W. C. Barton.

Caucalis nodosa, Scop. Dry hedge-bank, Haggs, Dalton-in-Furness, v.-c. 69, Sep. 20, 1912. The books say that the umbels of this plant have involucral bracts none or one. All these plants have several, and this seemed to be the case with all the plants at this station.—D. Lumb. "Yes, a new county record for 69."—G. C. Druce.

Hedera Helix, L. Seedlings. Millwood, Dalton-in-Furness, v.-c. 69, Sep. 30, 1912.—D. Lumb.

Sambucus nigra, L. Seedlings. Askham Ironworks, v.-c. 69, Aug. 16, 1912.—D. Lumb.

Galium Mollugo, L., var. ? *insubricum*, Gaud. Hedge, Bolston, v.-c. 36, July 31, 1907. Coll. A. Ley. I was with Mr Ley and collected this at the same time, and now send it to the Club for the sake of expert opinion, as Mr Ley had doubts about the same.—H. J. Riddelsdell. "Yes, *G. insubricum*, Gaud. *G. elatum*, var. *umbrosum*, Gren. & Godr., agreeing with the spec. in Schultz *Herb. Normale.*" —G. C. Druce. "Agrees admirably with Babington's description. A rare form, in Britain, which I have never been able to find."—E. S. Marshall.

Galium Mollugo, L., var. [Ref. No. 1301.] Railway bank near Tintern, v.-c. 34, June 14, 1912.—H. J. RIDDELSDELL.

Galium Mollugo, L., var. [Ref. No. 1310.] Rocky pasture above Lancaut, v.-c. 34, June 1912. This form seems common about the neighbourhood. In the above locality it was small and prostrate. Plants growing by the railway near the tunnel between Tintern and Tidenham (also now sent to the Club [Ref. No. 1301]) were larger and nearly erect. A similar form was found growing on a wall below St Briavel's [Ref. No. 1306] at c. 600 ft. I believe they are all a variety (? *Bakeri*, Syme) of *G. Mollugo*, with narrow leaves, and all four to six weeks earlier than the type in coming into bloom.—H. J. RIDDELSDELL. "Probably 1310 is an *erectum* form. Freyn named a similar plant from The Parks, Oxford, *G. Mollugo*, var. *erectum*, Beck. It is an interesting form, worthy of further study. 1301 and 1306 may belong to *Bakeri*."—G. C. DRUCE.

Galium Mollugo, L., var. [Ref. No. 1306.] Wall near St Briavel's, v.-c. 34, June 16, 1912.—H. J. RIDDELSDELL. "Var. *Bakeri*, Syme. In Somerset I find that it flowers two or three weeks before the type, and about as early as *G. erectum*."—E. S. MARSHALL.

Galium ? *erectum*, Huds. [Ref. No. 1309.] Near Freams Farm, Cranham, v.-c. 33, July 9, 1912. I believe it is this species rather than a *Mollugo* form.—H. J. RIDDELSDELL. "I believe so."—E. S. MARSHALL. "Probably, but one would like to have seen it in fruit."—G. C. DRUCE.

Galium uliginosum, L. Oughton Head Common, Hitchin, Herts, June and Aug. 1912.—J. E. LITTLE.

Sherardia arvensis, L., var. *maritima*, Griseb. Cultivated ground near Hitchin, Herts, June and Sept. 1912. Intermixed with type, in fair abundance. Is it found in other inland counties?—J. E. LITTLE. "Yes, it would be interesting to see if the character of obsolete calyx-teeth is retained in culture. It occurs in Oxfordshire, &c."—G. C. DRUCE.

Valerianella olitoria, Poll., var. *lasiocarpa*, Reichb. Chalky bank on Chilterns above Princes Risborough, Bucks, May and June, 1912.—F. L. FOORD-KELCEY. "The fruits sent to me are quite glabrous, but for a few hairs at the apex; only type, I should say."—E. S. MARSHALL. "My specimens have a few hairs on the fruits, but at the best it is but a feeble variety."—G. C. DRUCE.

Aster novi-belgii, L. (?) In marshes, thickets near the railway loop-line, Wolvercote, Oxon, Sep. 1912. Originally brought with

ballast and noticed there first in 1888, but now spreading freely in the vicinity. The name is given with some hesitation.– G. C. DRUCE. "This is *Aster longifolius*, Lam. (saltem valde approx.)"—A. THELLUNG.

Erigeron mucronatus, DC. Old walls, St. Peter Port, Guernsey, Aug. 4, 1912. Established over forty years.—W. C. BARTON. "Dr THELLUNG names it *E. Karvinskianus*, DC., var. *mucronatus* (DC.) Aschers. But they are kept as distinct species in *Ind. Kew.*"—G. C. DRUCE.

Filago spathulata, Presl. Garden weed, Totland Bay, Isle of Wight, Sep. 6, 1912.—W. C. BARTON. "Yes."—G. C. DRUCE and C. E. SALMON.

Filaga apiculata, G. E. Sm. Frilford Heath, Berks, Aug. 1912. —G. C. DRUCE.

Filago germanica, L., var. *axillaris*, mihi. [Ref. No. 5008.] See *Report* 1912, p. 164. Near Stow Wood, Oxford, Aug. 1912. Brébisson (*Fl. Normand.* 162, 1869) describes an analagous condition of *F. spathulata* as *brachyclada*.—G. C. DRUCE.

Gnaphalium uliginosum, L. [Ref. No. 790.] Burgh Heath, Surrey, July 28, 1912. A prostrate form remarkable for the manner in which the numerous branches were appressed to the soil.—C. E. BRITTON. "Yes, a prostrate form of the type (var. *incanum*, Neilr.) with glabrous achenes."—G. C. DRUCE.

Inula crithmoides, L. Salt marshes, Keyhaven, S. Hants, July 26, 1912. Although long known as an inhabitant of the pebbly strand at Hurst Castle, on the Solent, this plant for the first time appeared to have extended its limits, and I found it this summer in two places, distant about three-quarters of a mile from each other, (*a*) near the Coastguards' House, Keyhaven, and (*b*) on shingle-banks near the Sturt Point, Milford-on-Sea.—J. C. MELVILL.

Helianthus scaberrimus, Ell. *Sketches*, ii., 423, 1824, not of Bentham *Bot. Voy. Sulph.*, 28, 1844 = *H. rigidus*, Desf. *Cat. Hist. Paris*, Ed. 3, 184, 1829. Alien, North America. Waste ground, Oxford, Sep. 1909. Also seen in an arable field near Ambrosden, Oxford, 1911. In the *Ind. Kew.*, Desfontaines' later name is retained, but Elliott's has precedence of that and of the later *H. scaberrimus* of Bentham.—G. C. DRUCE.

Rudbeckia laciniata, L. [Ref. No. 807.] Very abundant by the Lunan, near Friockheim; quite naturalised; v.-c. 90, Sept. 19, 1912. —R. and M. CORSTORPHINE. "Yes."—A. THELLUNG.

Galinsoga parviflora, Cav. A garden weed in Bate's Nursery, Oxford, which I have not seen before in the county. Oct. 1912.—G. C. DRUCE.

Anthemis arvensis, L. Seedlings. Gangsdown Hill, Oxfordshire, June 1912.—G. C. DRUCE.

Chrysanthemum Leucanthemum, L., hairy form. Cindery railway bank, Mickle Trafford Station, Cheshire, v.-c. 58, June 5, 1912.—C. WATERFALL. "Yes, Rouy (*Fl. France*, viii. 272) ignores the character of pubescence in this polymorphic species."—G. C. DRUCE.

Matricaria suaveolens, Buchenau. Waste ground, Whitchurch, Salop, v.-c. 40, July 1912.—J. COMBER. Also from railway bank, Hopetoun, v.-c. 84, July 13, 1912.—McT. COWAN, jun.

Artemisia maritima, L., near var. *gallica* (Willd.). [Ref. No. 72.] Beside River Colne, Wivenhoe, Essex N., Sept. 19, 1912. Apparently referable to var. *gallica* from their upright branches, but differ from No. 73 in the branches being always turned somewhat to one side of the stem, while in No. 73 they spring equally from all sides. This is not apparent in dried specimens, but very noticeable when fresh. This is doubtless the plant recorded for 'Colchester and Wivenhoe' in Gibson's *Essex Flora*. Also [Ref. No. 73] from foreshore, near golf links, East Mersea, Essex N., v.-c. 19, Sept. 12, 1912.—G. C. BROWN. "This appears to be near the *A. maritima*, L., *forma*, *A. gallica*, var. *densiflora* (Viv. *Fl. Cors.*) Tiges rameaux, à rameaux courts, panicule médiocre subpyramidale, serrée, a ramuscules densement rapprochés; calathides ordt. plus petites que dans var. *robusta*, Rouy *Fl. Fr.*, p. 300. No. 72 may also belong here."—G. C. DRUCE.

Tussilago Farfara, L. Seedlings. Askham Ironworks, v.-c. 69, Aug. 18, 1912.—D. LUMB.

Senecio paludosus, L. Cult., Underdown, Ledbury; probable origin, Wicken Fen, Aug. 3, 1912.—S. H. BICKHAM. "Fine examples; carefully prepared."—J. CRYER.

Senecio Jacobœa, L. Seedlings. Askham Ironworks, v.-c. 69, Aug. 19, 1912.—D. LUMB.

Senecio viscosus, L. Shingly shore, Conway beach, Llandudno, v.-c. 49, July 18, 1912.—S. H. BICKHAM.

Senecio sylvaticus, L. [Ref. No. 4924.] A slender erect form on a heath near Pyrford, Surrey, July 1912.—G. C. DRUCE.

Senecio vulgaris, L., var. ——. Larne, Antrim, July 1912. Not recorded in *Cybele Hibernica* for North Ireland. Prof. Trow thinks this may be a *praecox* hybrid although the foliage is not suggestive of that parentage.—G. C. DRUCE.

Senecio vulgaris, L., × *S. vulgaris*, L., var. *radiatus*, Koch. Growing in a garden at Llandaff, 1912. Very probably this hybrid. —H. J. RIDDELSDELL.

S. vulgaris, L., var. *radiatus*, Koch (though not as described in *Bab. Man.*, for the rays are broad and patent and many, each as long as the disc is broad). Garden, Llandaff, v.-c. 41, Nov. 29, 1912.—H. J. RIDDELSDELL.

Senecio vulgaris, L., var. *rubricaulis*, Trow. Burstow Park, near Outwood, Surrey, May 1, 1912. This pretty Groundsel attracted attention by its red stems, woolliness, and stiff crisped leaves. It is evidently closely allied to the Cross Common Groundsel, mentioned by Dr Trow in the *Journal of Genetics*, ii., p. 271, 1912. The name on the label is suggested by Dr Trow.—C. E. SALMON. "Trow wrote *S. rubricaulis*."—G. C. DRUCE.

Senecio erectus, Trow. Sandy fields, Mildenhall, Suffolk, v.-c. 26, April 20, 1912. A very common weed on cultivated and waste land on all calcareous soils in the Cambridge district.—R. S. ADAMSON.

Senecio spathulifolius, DC. This grew in marshy places among the sand dunes of Le Touquet, France, and I thought members might like to have it to compare with their Holyhead specimens. In the vicinity I saw seedlings of *Aceras anthropophora* growing among the pine-needles in the wood.—G. C. DRUCE.

Echinops Ritro, L. Of this European species a few specimens were seen naturalised by the stream in the Forge Valley, N.E. Yorks., Aug. 1912. In the vicinity was *Anchusa sempervirens*. It is an addition to our list of alien species.—G. C. DRUCE.

Arctium nemorosum, Lej. (*intermedium*, Reichb. fil.) North slopes of Craig Breidden, Montgomeryshire, N. Wales, at 250 feet upwards, Aug. 5, 1912.—J. C. MELVILL. "Is *Lappa minor*, DC. = *Arctium minus*, Schrank."—J. A. WHELDON. "Surely, *A. minus*, Bernh. Dr Moss informs me that the name of *nemorosum*, Lej. cannot stand." —E. S. MARSHALL. "*Arctium pubens*, Bab. forma *glabrescens*."—A. THELLUNG. "I should call this *minus*; it has not the habit, size of heads, etc., of *nemorosum*, Lej., of which I have a photograph of type."—C. E. SALMON.

Cirsium anglicum, DC., var. *polycephalum*, Druce. Formoyle Hill, Londonderry, July 1912. Under *Cirsium britannicum* I have described this variety in the *Report* 1912, p. 165. The trivial name *britannicum*, which Williams adopts in *Prodromus*, though not without challenge, for this species, dates from Scopoli *Iter Goriz.* of 1769, whereas *Carduus pratensis* dates from the *Flora Anglica* of 1778 (not Jacquin). There is already *Cirsium pratense*, DC., which is a plant identical with, or allied to *monspessulanum*. But unaware of this I used *Cirsium pratense* for this species in my *Flora of Berks.* Is *Pseudo-Forsteri* more than a nomen nudum? If published, these plants may well come under it as *Cirsium britannicum* or *pratense*, var. *Pseudo-Forsteri*. The trivial *anglicum* used by Lobel only dates from DC. 1805.—G. C. DRUCE. "My specimen bears but one head, and seems untypical only in foliage. Has Mr Druce described the variety? I do not think that De Candolle's trivial holds good; the earliest post-Linnean name is *Carduus pratensis*, which Hudson, in his second edition quotes as of Jacquin."—E. S. MARSHALL. "See *Wat. Bot. Ex. Club Rep.*, 1901-2, p. 15, where reasons are given for considering this plant—which is evidently the same as the Sussex form—not to be *polycephalum*, but nearer *Pseudo-Forsteri*."—C. E. SALMON.

Cirsium setosum, M. Bieb. Poynings, Sussex. Found growing in some profusion at Poynings, Sussex, and was told it was increasing rapidly. It seems quite naturalised there. Aug. 6, 1912.—A. WEBSTER. "I thought at first this might pass as named, as in my own example the leaves seemed almost entire; however, Mr Cryer tells me that the leaves on his specimen may be called almost pinnatifid, so I believe the correct name would be *C. arvense*, Scop., *β. mite*, Koch. In true *setosum*. the leaves are flat, and not decurrent, besides being more entire and obtuse."—C. E. SALMON. "I think this is best placed under *C. arvense*, Scop., *β. mite*, Koch."—J. CRYER. "Dr Thellung names this *Cirsium arvense*, Scop., var. *setosum*, M. Bieb., to which, but not as an extreme form, I have named it."—G. C. DRUCE.

Centaurea nigra, L., *forma*. [Ref. No. 4762.] This radiate form is common in some of the marshy meadows of the Vale of Aylesbury. These came from near Grendon Underwood, Bucks., June 1912. The Linnean *nigra* is not radiate.—G. C. DRUCE. "A small form of what we consider as the type; it varies much in foliage."—E. S. MARSHALL. "Would come under *C. nemoralis*, Jord., = *C. nigra*, var. *genuina*, Williams."—J. A. WHELDON.

Centaurea nigra, L., var. *decipiens*, Syme (non Thuill.). [Ref. No. 40.] Marshy part of one sandy field, Grandes Rocques, Guernsey, Aug. 15, 1912. Agrees best with *C. pratensis*, Thuill.; is not

C. decipiens, Thuill. Mr Marquand, *Fl. Guernsey*, says the rayed form is generally distributed, but I found it only in the marshy part of one field, where it was dominant. The involucre bracts varied from dark to light brown; all heads were rayed.—W. C. BARTON. "Yes, what I call var. *decipiens*, Syme."—G. C. DRUCE. "Apparently *C. consimilis*, Bor., which has pale brown appendages and the calathia arachnoid at the base."—J. A. WHELDON.

Crepis capillaris, Wallr., var. *diffusa* (DC.). Stow Wood, Oxon., in sandy fields, Aug. 1912. This appears to be a second flowering of the year, as there are remains of the previous stems. Perhaps some one will try to grow it from the achenes to prove its constancy, if, indeed, this species, like so many of the *Compositae*, is not apogamous. —G. C. DRUCE.

Hieracium aurantiacum, L. Alien. Origin, sand dunes near Formby. Cult., Walton, S. Lancs, v.-c. 59, July 1912.—J. A. WHELDON. "Correct; not easily mistaken."—E. F. LINTON.

Hieracium iricum, Fries. Sandstone crags at seashore, 10—25 feet above sea level, south side of Pegal Bay, Waas, Hoy, Orkney, July 16, 1912.—H. H. JOHNSTON. "Very fine specimens of this species, showing the gradation from few-leaved to stems with five to six leaves. The head in formation shows well the *lax outer* phyllaries, with their usual clothing."—E. F. LINTON. "Fine specimens. Reported for Gordale, v.-c. 64, N.W. Yorks, but not seen for many years. Probably extinct now."—J. CRYER.

Hieracium amplexicaule, L. Walls at Oxford, where it has been naturalised since 1794, but I did not gather the root-stock. July 1912. —G. C. DRUCE. "Yes. Specimens do not show the persistent characteristic root-leaf."—J. CRYER. "Correct."—E. F. LINTON.

Hieracium rubicundum, F. J. H. Cwm Idwall, Carnarvonshire, v.-c. 49, July 13, 1912.—W. A. SHOOLBRED. "Good specimens of *H. rubicundum*, F. J. H."—J. CRYER. "Rightly named."—E. F. LINTON.

Hieracium rubicundum, F. J. H. Sandstone crags at sea-shore 10—25 feet above sea level, west side of Walkmill Bay, Orphir, Mainland, Orkney, July 19, 20, 1912. Native. Leaves dark green above, paler purplish green beneath; phyllaries blackish green, with copious blackish bristles; flowers not scented; corolla yellow; style and its spirally recoiled branches yellow.—H. H. JOHNSTON. "Very typical specimens with the rather thick leathery purpurascent leaves, broad phyllaries thinly clothed."—E. F. LINTON.

Hieracium rubicundum, F. J. H., var. *Boswelli*, Linton. Mountain limestone, on the coast, Silverdale, May 29, 1912. Specimens gathered on July 20, 1909, were named by the late Rev. A. Ley *H. rubicundum*, F. J. H., var. *Boswelli*, Linton.—J. CRYER.

Hieracium caledonicum, F. J. H. Grassy crags at sea-shore, 20-30 feet above sea-level, Scapa, St Ola, Mainland, Orkney, July 5, 1912.—H. H. JOHNSTON. "Typical plants."—E. F. LINTON.

H. Sommerfeltii, Lindeb., var. *splendens*, F. J. H. Great Scar Limestone, Skirethornes, v.-c. 64, alt. 700 feet, July 27, 1912.—J. CRYER.

Hieracium hypochaeroides, Gibs. Ruined walls of Castle Dinas Bran, above Llangollen, Denbighshire, v.-c. 50, June 15, 1912, fide Rev. E. F. Linton.—C. WATERFALL.

Hieracium britannicum, F. J. H. Great Scar Limestone, Miller's Dale, v.-c. 57, May 27, 1912.—J. CRYER. "Foliage very typical."—E. S. MARSHALL.

Hieracium ——? [Ref. No. 344.] (Styles yellow.) On a stony knoll, Great Orme's Head, v.-c. 49, Aug. 18, 1912.—S. H. BICKHAM. "A dwarf form of *H. britannicum*, F. J. H. Exactly matches some specimens I have from Linton, in Yorkshire."—J. CRYER. "Rather stunted plants of *H. britannicum*, F. J. H."—E. F. LINTON.

Hieracium britannicum, F. J. H. West side of Great Orme's Head, Carnarvonshire, v.-c. 49, July 9, 1912.—E. S. MARSHALL and W. A. SHOOLBRED.—"The remark on Mr Bickham's hawkweed, No. 344, applies here."—J. CRYER. "Correct."—E. F. LINTON.

Hieracium pellucidum, Laestad. Great Scar Limestone, Ling Gill, v.-c 64, alt. 900 feet, Aug. 10, 1912; and from Silverdale, railway-side, v.-c. 60, alt. 25 feet, July 7, 1912. A new county record.—J. CRYER. "Correct."—E. F. LINTON and E. S. MARSHALL.

Hieracium decolor, W. R. Linton. Great Orme's Head, Carnarvonshire, v.-c. 49, July 2, 1912.—W. A. SHOOLBRED. "Phyllaries less floccose and hairy, but much more glandular than typical Yorkshire *H. decolor*."—J. CRYER. "Yes."—E. F. LINTON.

Hieracium maculatum, Sm. Great Scar Limestone, Grassington, v.-c. 64, altitude 900 feet, June 30, 1912.—J. CRYER. "I think that this may be a weak state of *H. maculatum* from Ingleton, W. Yorks,

issued in the Lintons' *Set.*"—E. S. MARSHALL. "Right."—E. F. LINTON.

Hieracium——? Volcanic ash, Cwm Idwall, Carnarvonshire, v.-c. 49, July 13, 1912.—E. S. MARSHALL and W. A. SHOOLBRED. "Seem to be undersized specimens of *H. Adlerzii*, Almq. The phyllaries of well developed plants are usually more glandular."—E. F. LINTON.

Hieracium diaphanoides, Lindeb. Bottom of Cwm Glas, Carnarvonshire, v.-c. 49, July 4, 1912.—W. A. SHOOLBRED. "Yes."—E. F. LINTON.

? *Hieracium vulgatum*, Fries, var. *subravusculum*, W. R. L. Near Haweswater, Silverdale, v.-c. 60, May 25, 1912. Mr Marshall says, 'Best referred I believe to *H. vulgatum* var. *subravusculum*, W. R. L.' It differs however in many respects from the Bolton Abbey specimens. See *Journ. Bot.*, Sep. 1902; whereas other Silverdale specimens from the coast match the Bolton Abbey specimens very closely.—J. CRYER. "Compact plant, short peduncle, under type."—E. F. LINTON.

Hieracium orcadense, W. R. Linton. Sandstone crags at sea shores, 10-30 feet above sea level, west side of Walkmill Bay, Orphir, Mainland, Orkney, July 19 and 20, 1912. Leaves green above, paler green beneath; phyllaries blackish green, with copious blackish bristles; flowers faintly scented; corolla yellow; style brown, branches spirally recoiled, brown beneath, yellow above. The Rev. E. F. Linton writes:—'Beautiful specimens, one showing more sharply toothed leaves than usual, but it is a luxuriant specimen. All my previous specimens were from Hoy, where my brother discovered it under your guidance. The flower head in formalin is wonderfully fresh and natural.'—H. H. JOHNSTON. "I am glad to see this very rare and good species from a second station."—E. S. MARSHALL.

Hieracium ——? Cwm Idwall, Carnarvonshire, v.-c. 49, July 13, 1912.—E. S. MARSHALL and W. A. SHOOLBRED.

Hieracium ? *diaphanoides*, Lindeb. Dolwyddelan, Carnarvonshire, v.-c. 49, July 5, 1912.—W. A. SHOOLBRED. "This appeared to be a luxuriant state of the Capel Curig *diaphanoides*, confirmed by Rev. E. F. Linton, when fresh. The specimen sent to him was branched from the base and abnormal, so I doubt both his suggested alternatives, *H. irriguum*, *H. Adlerzii*."—E. S. MARSHALL. "Not *H. diaphanoides*, Lindeb."—E. F. LINTON.

Hieracium gothicum, Fr. [Ref. No. 3741.] Locally plentiful by streamlet about a mile and a half from Capel Curig, on the way to Llyn Ogwen, Carnarvon, v.-c. 49, July 23, 1912. Styles yellow; ligules glabrous-tipped.—E. S. MARSHALL "The specimens are weak compared with Yorkshire and North Lancashire examples."—J. CRYER. "I agree."—E. F. LINTON.

Hieracium sparsifolium, Lindeb, var. *placerophyllum*, Dahlst. Great Scar Limestone, Ling Gill, v.-c. 64, alt. 900 feet, Aug 10, 1912. In great abundance on the banks of a mountain stream.—J. CRYER. "A very good example of this variety."—E. F. LINTON. "Just like Ley's specimens from Chapel-le-Dale."—E. S. MARSHALL.

Hieracium sparsifolium, Lindeb., var. *strigosum*, Ley.? On rocky side of a hill through which a railway tunnel is pierced, near Galashiels, Roxburgh, v.-c. 80, altitude 494 feet, 1912.—I. M. HAYWARD. "I should say this comes under *H. vulgatum*, Fr."—J. CRYER. "*H. vulgatum*, Fr., var. *sejunctum*, W. R. L."—E. F. LINTON.

Hieracium——? [Ref. No. 4776.] Botley, S. Hants., June 1912. —G. C. DRUCE. "*H. rigidum*, Hartm., var. *scabrescens*, Dahlst."—E. S. MARSHALL. "*H. tridentatum*, Fr., probably var. *setigerum*, Ley."—J. CRYER. "Under *H. tridentatum* and if the styles were yellow and not livid, var. *acrifolium*, Dahlst., rather than type."—E. F. LINTON.

Hieracium umbellatum, L., var. *coronopifolium*, Fr. Sand dunes near Freshfield, S. Lancs., v.-c. 59, Aug. 1912. Two, if not more, forms of this species occur on the Lancashire sand dunes. These specimens do not seem to agree well with the plant recently distributed as var. *dunale*, which Mr Druce states is the plant we have been calling var. *coronopifolium*.—J. A. WHELDON. "Perhaps right (as a narrow-leaved form), though it is quite as near var. *linariifolium*, Wallr."—E. S. MARSHALL. "I should say var. *linariifolium*, Wallr. In my specimen the leaf margins are strongly revolute."—J. CRYER. "May be placed under var. *coronopifolium*, but towards the type."—E. F. LINTON.

Hieracium——? Great Scar Limestone, Skirethornes, v.-c. 64, altitude 700 feet, July 1912. After comparing a considerable number of specimens with authentic *H. Lintoni*, Ley. (*H. sagittatum*, Lindeb., var. *maculigerum*, W. R. L.), I am strongly of opinion that the above is a robust specimen of *H. Lintoni*, Ley. Some specimens have hairy and not very glandular phyllaries, others have 'numerous glandular' phyllaries.—J. CRYER. "I think you are right."—E. F. LINTON.

Note on *Report* 1911, p. 105.

Hieracium crocatum, Fr.—J. Cryer. Suggested by E. S. Marshall to be *H. corymbosum*, var. *salicifolium*, Lindeb., is considered by the Rev. E. F. Linton to be *H. crocatum*, Fries.

Hypochaeris glabra, L. Frilford, Berks, July 1912. When I was working this area twenty years ago, I did not observe this plant, the locality then being occupied by a rabbit-warren in which little save *Senecio Jacobaea*, *Carduus nutans* and *Echium* appeared. Now, the rabbits being reduced in number, I was amazed to see the ground covered with this species intermixed with *Potentilla argentea*, etc. But on visiting the spot a month later, the ground had been ploughed and only few specimens could be seen.—G. C. Druce. "Also from Lancresse Common, Guernsey, July 31, 1912."—W. C. Barton.

Leontodon hispidum, L., *forma*. Downs round Winchester, South Hants, v.-c. 11, June 1912.—J. Comber. "Phyllaries practically glabrous, but for the pale ciliation at and near the tips. I cannot name this."—E. S. Marshall. "Notwithstanding the nearly glabrous phyllaries, Dr Thellung only labels it *L. hispidum*, L."—G. C. Druce.

Leontodon hispidum, L., var. *glabratum*, Gren. and Godr.? [Ref. No. 346.] Meadow grass, Malvern Wells, v.-c. 37.—Coll., R. F. Towndrow. Comm., S. H. Bickham. "Feuilles, scape et péricline glabres ou parsemés de quelques poils, ceux-ci parfois simples."—Gren. and Godr. "Rouy (*Fl. Fr.*, x., 31, 1908) calls this *L. proteiformis*, Vill., var. *glabratus*, G. and G., and the description given would seem to apply to Mr Bickham's plant."—C. E. Salmon. "*L. hispidum*, L., var. *vulgaris* (Koch) Bischoff, acced. ad var. *pseudocrispum*, F. Schultz."—A. Thellung.

Leontodon hirtum, L., var. *lasiolaenum*, Druce. [Ref. No. 345.] Barnard's Green, S. Malvern, v.-c. 37, Sept. 17, 1912.—S. H. Bickham and R. F. Towndrow. "Curious little plants, coming under *L. nudicaule*, Banks and Solander. I do not know the variety, but the heads are by no means 'shaggy.'"—E. S. Marshall. "Yes; *L. nudicaule*, Banks, var. *lasiolaenum* (Bisch.)."—G. C. Druce.

Taraxacum ——. Cefn Cribeor and Penyfae Common, Bridgend, v.-c. 41, May 1912. Probably true *T. palustre*, DC. Outer bracts of involucre adpressed, except in fruit, broad; midrib of leaf red; florets with considerable amount of red at the tips; leaves variously cut.—H. J. Riddelsdell. "Outer phyllaries with a very narrow hyaline border; fruit very pale. *T. udum*, Jord., I believe."—E. S. Marshall. "*T. palustre*, DC."—C E. Salmon. "Dr Ostenfeld remarks, 'ex aff. *T. spectabile*, Dahlst.'"—G. C. Druce.

Taraxacum ——. Sands of Barry Island, v.-c. 41, April 18, 1912. Phyllaries vary considerably, from broad to nearly linear, glaucous to green, erect to ± reflexed. Growing with *T. officinale*, Weber, and perhaps a series of hybrids between that and some other form, which, however, I did not detect.—H. J. RIDDELSDELL. "Fruit brick-red; *T. erythrospermum*, Andrz."—E. S. MARSHALL.

Taraxacum ——. Turf of cliff top. Porthkerry, v.-c. 41, April 18, 1912. Apparently what we have been calling *T. udum*, Jord., though now, I believe, we are to give it another name. These specimens vary much in cutting of leaf, but not in character of phyllaries.—H. J. RIDDELSDELL. "Not determinable without fruit; but it looks like a small form of *T. udum*, Jord."—E. S. MARSHALL. "Fruit bright red. *T. erythrospermum*, Andrz., I believe."—C. E. SALMON.

Taraxacum erythrospermum, Andrz. Shore dunes near North Berwick, v.-c. 82, June 22, 1912.—Mr T. COWAN, jun. "One of my plants had red, the other greyish-brown, achenes, *T. laevigatum*, DC. It is a new county record for 82. Handel-Mazzetti makes *laevigatum*, DC., and *erythrospermum*, Andrz., synonymous. (The British *laevigatum* is referred to *obliquum*.)"—G. C. DRUCE. "No; the fruit is greyish brown, not red; *T. laevigatum*, DC."—E. S. MARSHALL. "Fruit looks much too pale for *erythrospermum*, and I think this must be *laevigatum*, DC."—C. E. SALMON.

Lactuca virosa, L. Taplow, Bucks., Aug. 1912. This is the plant with undivided leaves = var. *integrifolia*, S. F. Gray, *Not. Arr.* ii., 417, 1821, which is based on *Lactuca sylvestris, folio non laciniato*, Ray's *Syn.* 162, n. 3, 1724. It has proved constant in cultivation here.—G. C. DRUCE.

Sonchus oleraceus, L. Seedlings. Askham Ironworks, v.-c. 69, Aug. 19, 1912.—D. LUMB.

Lobelia urens, L. Near Axminster, v.-c. 3, July 15, 1912. See *Journ. Bot.*, 1912, p. 350.—H. J. RIDDELSDELL. "Carefully prepared and very acceptable."—J. CRYER.

Campanula rapunculoides, L. Windymains, Haddingtonshire, v.-c. 82, Aug. 10, 1912.—M'T. COWAN, jun.

Campanula rapunculoides, L. Alien. Waste ground, originally sand dunes, Waterloo, S. Lancs., v.-c. 59, July 1912. Spreads rapidly by the roots, but as the flowers are always gathered, a few roots were transplanted and flowered in the garden.—J. A. WHELDON. "Yes, it is a new county record for 59, where I saw it in 1911, but probably it is of garden origin."—G. C. DRUCE.

Legousia hybrida, Delarbre. Cornfield, Stanway, Essex N., v.-c. 19, June 11, 1912.—G. C. Brown.

Trachelium coeruleum, L. Old wall, S. Peter Port, Guernsey, Aug. 4, 1912.—W. C. Barton.

Arctostaphylos Uva-ursi, Spreng. S.W. Yorkshire and N. Derbyshire specimens, July 31, 1912. From two fresh localities recorded in the *Naturalist*, 1908, p. 288, by Dr Moss.—A. B. Jackson.

Calluna vulgaris, Hull, var. *Erikae*, Aschers. Frilford Heath, Berks, with the type, Aug. 1912. Also noticed on Formoyle Hill, Londonderry; at Rannoch, Argyle; Perth; Clova, Forfar; and N.E. Yorkshire.—G. C. Druce.

Calluna vulgaris, Hull, var. *Erikae*, Aschers. Kynance Downs, Lizard, v.-c. 1, Aug. 10, 1912.—C. C. Vigurs. "Yes; Dr Graebner and I gathered it there in 1911."—G. C. Druce.

Calluna vulgaris, Hull, var. *Erikae* (?). Kirby Moor, alt. 900 feet, v.-c. 69, Oct. 2, 1912.—D. Lumb. "No; type, *Calluna vulgaris*, Hull."—J. Cryer.

Pyrola rotundifolia, L., var. *maritima*, Kenyon. Sandhills, Freshfield, S. Lancs., v.-c. 59, Aug. 1912.—W. G. Travis.

Statice Armeria, L. Salt marsh, near Churchtown, S. Lancs., v.-c. 59, Sep. 1912.—J. A. Wheldon. "No; *S. maritima*, Mill., or *S. linearifolia*, Laterr., but my specimens are too young to say which."—G. C. Druce.

Anagallis arvensis, L. [Ref. No. 889.] Pasture, Merton parish, Surrey, Sept. 4, 1912. Prominent here were various Pimpernels: solitary examples of *Anagallis femina*, Mill. (*A. cærulea*, Schreb.); *A. carnea*, Schrank; and *A. arvensis*, in great abundance, both of the normal plant and a pink-flowered form, and in lesser quantity, the purple-flowered plant, now distributed. Besides the colour of the corolla, it is also characterised by the circumstance of the upper leaves being in whorls of three, instead of being opposite, thus combining the marks of the sub-var. *violacea*, Delac., and var. *verticillata*, Diard., = var. *ternata*, Williams. Mr Williams (*Prod. Florae Brit.*, part 7, p. 430) implies that the variety with ternate leaves is a smaller and much more compact plant. Observation in the field shows that towards the close of the summer, it is usual for the lengthening stems of *Anagallis arvensis* to develop the leaves in whorls of three.—C. E. Britton. "Flowers blue, but the hairs on corolla are apparently

3-celled and clavate, etc., and, following Mr Edwards (*Journ. Bot.*, 1906, p. 368), one would class this as a blue *A. arvensis*, and not *caerulea*. As regards the stem character given (l.c.), I have certainly found good *arvensis* with either ascending or erect stems.—C. E. SALMON. "Unfortunately my specimen consists of only one piece, about fifteen inches long, unbranched, evidently part of a large plant. I cannot think it to be restricted *A. arvensis*, L., which I have never seen with blue flowers, or with such a habit. The characters, though they do not fully coincide, agree best with the description and remarks on *A. latifolia*, L., in Williams' *Prod. Fl. Brit.*, part 7, pp. 431-2. Whether this identification is correct or not, I am unable to say; but Mr Britton's handsome plant is neither typical *A. arvensis* nor typical *A. foemina*, Mill."—E. S. MARSHALL. "Surely this has nothing to do with *A. latifolia*, L."—G. C. DRUCE.

Fraxinus excelsior, L. Semi-pendulous. Aug. 23, 1912, Elwes and Henry in *Trees of Great Britain and Ireland*, vol. iv., p. 868, mention a form of the weeping ash, called by Loudon the Kincairney Ash which grew in the parish of Caputh, near Dunkeld, Perthshire, and had alternately pendulous and upright branches. I enclose leaves, 2 fruits, and two photos of one growing in Bucks, the most marked of several similar trees, occurring occasionally about Long Down Hill and the Icknield Way in the parishes of Risborough and Kimble. Do they resemble the Kincairney Ash?—F. L. FOORD-KELCEY.

Fraxinus excelsior, L. Seedlings. Orchard, Askham, v.-c. 69, Aug. 28, 1912.—D. LUMB.

Cicendia pusilla, Griseb. Damp ground near Fort Doyle, Guernsey, July 25, 1912. In considerable numbers over a limited area, a short distance from the spot where it was originally found. Also at the second locality noted by Mr Marquand in less quantity.—W. C. BARTON. "After a lapse of many years Lady Davy rediscovered this species in 1911, and Mr Marquand tells me it was fairly plentiful in 1912 over the very limited area where it grows in Guernsey. Members will be glad of this rarity."—G. C. DRUCE.

Cynoglossum montanum, L. Mickleham, Surrey, May 30, 1912. The leaves become extremely thin and papery in the press, and I regret that several of them have become broken.—C. E. SALMON.

Symphytum peregrinum, Ledeb. [Ref. No. 6712.] Damp hedge, about four miles from Matlock, on the way to Ashborne Derby, in great quantity, June 1912.—G. C. DRUCE. "Right."—C. BUCKNALL.

Symphytum ——. Ditch near Unstead Bridge, near Godalming, Surrey, v.-c. 17, May 1912.—J. COMBER. "*S. peregrinum*, Ledeb. The calyx segments are not so acute as usual, but similar plants are met with occasionally."—C. BUCKNALL.

× *Symphytum discolor*, C. Bucknall, = *S. officinale*, var. *ochroleucum* × *S. peregrinum*. Bank of the Land Yeo stream near Flax Bourton, N. Somerset, June 1912. Specimens approved by Mr Bucknall. See *Journ. Bot.*, 1912, p. 333.—J. W. WHITE.

× *Symphytum densiflorum*, C. Bucknall, = *S. officinale*, β *purpureum* × > *peregrinum*. Bank of the Land Yeo stream near Gatcombe Mill, N. Somerset. Specimens approved by Mr Bucknall. June 1912. See *Journ. Bot.*, Nov. 1912, p. 334.—J. W. WHITE.

× *Symphytum lilacinum*, Bucknall, = *S. officinale*, α *ochroleucum*, × β *purpureum* > × *S. peregrinum*. Bank of the Land Yeo stream near Wraxall, N. Somerset, June 13, 1912. Specimens passed by Mr Bucknall. See *Journ. Bot.*, Nov. 1912, p. 334.—J. W. WHITE.

Pulmonaria angustifolia × *officinalis*. [Ref. No. 352.] Underdown, Ledbury, April 21, 1912. For a dozen years at least I have grown *P. angustifolia* (origin, near Lyndhurst) in one spot in my garden while *P. officinalis* has grown semi-wild in a shrubbery a quarter of a mile away. I noticed no hybrids until this year. *P. arvense*, a garden flower, which I have grown for twenty years, also produced this year for the first time a hybrid with *P. officinalis*.—S. H. BICKHAM. "A very similar natural hybrid once occurred in my garden at Milford between *P. angustifolia*, from the New Forest, and *P. officinalis*, var. *immaculata*, Opiz (*P. obscura*, Dumort.), from Burgate Wood, E. Suffolk; it soon died out."—E. S. MARSHALL. "Haud impossibile."—A. THELLUNG.

Myosotis sylvatica, Hoffm. In a wood near Great Tew, Oxford. This is extensively planted in the Park, and probably it has accidentally spread to this place; but it is not a native of the county. May 1912.—G. C. DRUCE.

Linaria purpurea × *repens*, nov. hybr. × *L. Dominii*. [Ref. No. 4852.] See *Report* 1912, pp. 168-169. On rockwork in my garden at Oxford, Aug. 1912.—G. C. DRUCE.

Linaria minor, Desf. This plant appeared on the embankment of the Midland Railway at Armley, near Leeds, last year. This year I traced it in patches with short intervals from Armley to Carnforth a distance of about 60 miles.—J. CRYER.

Scrophularia alata, Gilib. [Ref. No. 890.] Abundant in dens of Pitairlie and Craig Mill, Forfarshire, v.-c. 90, N.C.R., October 9, 1912.—R. and M. Corstorphine. "Yes, and a new county record extending its northern range from Fife to Forfar."—G. C. DRUCE.

Mimulus moschatus, Dougl. This well-known garden plant, a native of Western North America, was completely naturalised by the road-side but near a house, near Pentre, Denbigh, July 1912.—G. C. DRUCE.

Veronica Anagallis-aquatica, L. = *V. Anagallis*, Jacq. [Ref. No. 4911.] This is the true plant, as restricted by German authors, having pale blue flowers, crowded racemes, and ascending fruit-stalks. In the swift chalk stream which divides Bucks and Beds, near Eddlesborough, June 1912 (See *Report* 1911, pp. 26-27). Also from Wendlebury, Oxon. [Ref. No. 4842], June 1912.—G. C. DRUCE. "Although not so labelled by Mr Druce, this would seem to be his var. *glandulosa*."—J. A. WHELDON.

Veronica Anagallis, L., proper. June 29 and Aug. 20, 1912. On swampy ground near the confluence of the Ash Brook and Ippollitts Brook, Hitchin, Herts. Annual; flowers blue; pedicels glandular. If *V. Anagallis-aquatica*, L., is split, what becomes of var. *montioides*, Boiss.? *V. Anagallis*, L., occurs on Oughton Head Common, and *V. aquatica*, Bernh., on Caldwell Common, both near Hitchin.—J. E. LITTLE. "Yes, and as the rachis is glandular like the specimens from Oxford and Bucks, it is the var. *glandulosa*. *Montioides*, Boiss., is only an annual form and not a variety."—G. C. DRUCE. "Surely not an annual as stated. It would be an advantage to the Club if Mr Druce could oblige us with descriptions of restricted *V. Anagallis*, and of our more common plant, *V. aquatica*, Bernh. The latter varies in hue; usually the flowers are bluish lilac, but I have occasionally seen them pink or flesh-coloured."—E. S. MARSHALL. "The descriptions of the two plants are given in *Report* 1911, pp. 26-27, but on line 5 from bottom of p. 26, 'dense' should read 'laxer.' Annual forms (var. *montioides*, Boiss.) occur, but the normal plant is perennial."—G. C. DRUCE.

Veronica Anagallis, var. *glandulosa*. Gleaston Beck, Urswick, v.-c. 69, Oct. 4, 1912. The colour of the flowers was pale lilac with darker veins. Many of the plants were quite 2 feet high. The glands seem to be confined to the infloresence; the stem, leaves and bracteoles seem to be without them.—D. LUMB. "Looks different from Mr Druce's plant, having broader sepals and relatively shorter pedicels. Inflorescence long and dense-flowered as in *V. Anagallis*, but the pedicles appear to become horizontal ultimately, or even

slightly decurved. Seems, however, nearest to *V. Anagallis*, without being so typical as Mr Druce's specimen."—J. A. Wheldon "Abnormal specimens, and although probably *Anagallis*, I do not venture to speak positively."—G. C. Druce.

Euphrasia nemorosa, H. Mart., var. A condensate, strong growing form, abundant on the Barton Cliffs, Hordle, S. Hants, July 28, 1912.—J. C. Melvill. "I incline to think this an extreme form of *E. curta*, Wettst., var. *glabrescens*, Wettst. The leaves are not quite glabrous, which Wettstein, in his *Monograph*, says that they always are in *E. nemorosa*. Similar plants were indeed named *nemorosa* by Mr Townsend, but a great deal of what he so called agrees with authentically determined *E. curta*, var. *glabrescens*. I think that Mr Bicknall relies on a set of specimens given him by Mr Townsend; but Wettstein's opinion carries greater weight, and should be accepted in preference."—E. S. Marshall.

Euphrasia curta, Wettst., var. b. *glabrescens*, Wettst. Grassy heath 30 feet above sea level, The Bout, Veness, Orphir, Mainland, Orkney, July 19, 1912. As far as I am able to judge, they should be referred to *E. curta*, Wettst., var. *glabrescens*; though none of my plants, so determined by Professor Wettstein himself, have such remarkably large stem leaves. However, I do not see how they can be placed elsewhere. As he remarks in his *Monograph*, this variety is more or less intermediate between *E. curta* and *E. nemorosa*."—H. H. Johnston. "Mixed specimens."—C. H. Ostenfeld.

Euphrasia gracilis, Fr. (fide E. S. Marshall). Grassy banks at burn side, 15 feet above sea level, Burn of Ore, Waas, Hoy, Orkney, July 16, 1912.—H. H. Johnston. "Yes."—C. H. Ostenfeld.

Euphrasia. Heath on hill side, 320 feet above sea level, Brunt Hill, Stromness, Mainland, Orkney, Aug. 23, 1912. The Rev. E. S. Marshall writes:—'Difficult to name accurately, being starved. I incline to think it a reduced state of *E. gracilis*, Fr., with rather crowded leaves; the very small flowers favour this. If not, it is small *E. curta*, var. *glabrescens*, Wettst.'—H. H. Johnston. "*E. gracilis*, Fr."—C. H. Ostenfeld.

Euphrasia gracilis, Fr. (fide E. S. Marshall). Heath at burn side 10 feet above sea level. Pegah Burn, Waas, Hoy, Orkney, August 7, 1912.—H. H. Johnston. "Yes."—C. H. Ostenfeld.

Euphrasia gracilis, Fr. (fide E. S. Marshall). Heathery banks at burn side, 240 feet above sea level. North Dale, Waas, Hoy, Orkney, August 7, 1912.—H. H. Johnston. "Yes."—C. H. Ostenfeld.

Euphrasia scottica, Wettst. Heath on hill side, 310 feet above sea level, North Dale, Waas, Hoy, Orkney, August 7, 1912. The Rev. E. S. Marshall writes:—'This has the habit and general appearance of *E. scottica*, Wettst., and I think that it is best so named; material rather young, and not in fruit.—H. H. JOHNSTON. "Is *E. gracilis*, Fr."—C. H. OSTENFELD.

Euphrasia curta, Wettst., var. b. *glabrescens*, Wettst. Damp pasture on hill side, 300 feet above sea level, Wart Hill, Hoy, Orkney, Aug. 15, 1912. Rev. E. S. Marshall writes:—'I think this is a form of *Euphrasia curta*, var. *glabrescens*, Wettst., with handsome, violet-blue flowers.'—H. H. JOHNSTON. "?"—C. H. OSTENFELD.

Euphrasia curta, Wettst. (fide E. S. Marshall). Heathery pasture, 90 feet above sea level, Black Crag, Stromness, Mainland, Orkney, Aug. 19, 1912. — H. H. JOHNSTON. "Not *E. curta.*"—C. H. OSTENFELD.

Bartsia Odontitis, Huds., var. *verna*, Reichb. [Ref. No. 5231.] Balgavies, Forfar, Sept. 1912.—G. C. DRUCE.

Rhinanthus. Meadow, on Tidenham Chase, v.-c. 34, June 14, 1912. I believe *R. stenophyllus*.—H. J. RIDDELSDELL. "Very young; but the presence of intercalary leaves indicates *R. stenophyllus*, Schur.—E. S. MARSHALL.

Rhinanthus? *stenophyllus*, Schur. Alluvial meadow, near Penarth, v.-c. 41, June 3, 1912.—H. J. RIDDELSDELL. "No; only *Crista-galli*, I think; the Tidenham Chase *Rhinanthus* may be *stenophyllus*, but the specimens are poor."—G. C. DRUCE.

Utricularia minor, L. Shallow pools in a swamp, 160 feet above sea level, at foot of north-north-west slope of Cringla Fiold, Sandwick, Mainland, Orkney, Aug. 26, 1912. A new Orkney station for this species discovered on the above mentioned date by H. H. JOHNSTON. "Yes, but not in good condition to determine."—A. BENNETT.

Mentha longifolia, Huds. [Ref. No. 5229.] Glen Ogilvy, Forfar. Also seen by the South Esk, near Montrose. Similar to the plant sent by Mr A. Wilson from Dunbarney, Perth, to the Club in 1906, but as I then remarked 'the leaves are too broad and the serratures too faint for *mollissima*, Borck.' It also closely resembles the plant sent as *M. candicans*, Crantz, by Shoolbred and Marshall (No. 2178), from the Brodie Burn, near Forres, *Report* 1898, 584, but it is not *M. candicans*, as understood by the Austrian botanist. The smell is

quite disagreeable so that it can hardly have been used for culinary purposes, nor do I see evidence of a *rotundifolia* parentage. It is allied to the var. *pachylodes*, Briq. *Lab. Alp. Marit.*, 1891, 581, but I await M. Briquet's determination.—G. C. DRUCE. "This looks interesting but my example is only in young bud so it is impossible to compare it with the descriptions of the seventeen varieties mentioned by Rouy. I presume Mr Druce has satisfied himself it is not one of these."—C. E. SALMON.

Mentha longifolia, Huds., var.——? [Ref. No. 805.] Legaston Quarry, near Arbroath, v.-c. 90, Sep. 19, 1912.—R. and M. CORSTORPHINE. "I think there must be *rotundifolia* in this, and I see there is a var. *oblongifolia*, Strail, of which I do not possess a detailed description. I suppose this cannot be *longifolia* × *rotundifolia*?"—C. E. SALMON. "Near specimens named *M. villosa* by M. Malinvaud."—G. C. DRUCE. "I suggest a hybrid origin for this; viz., *M. aquatica* × *longifolia*."—E. S. MARSHALL. "Is *M. villosa*, Huds., = *longifolia* × *rotundifolia*."—A. THELLUNG.

Mentha longifolia, Huds., var. [Ref. No. 4944.] Near Kirkinner, Wigton, growing with *M. spicata* and the relics of cultivation, July 1912. This very distinct Mint, quite unlike, in its long, narrow, and sharply-toothed leaves, any in my collection, resembles *M. Nicholsoniana*, Strail, in the long plumose setaceous bracts. The leaves, however, are sessile, not petiolate as in that plant, and have a different outline. It is not sufficiently woolly to come under *mollissima*, Borck. I therefore propose to call it nov. var. *salicifolia*, but await M. Briquet's opinion before its publication.—G. C. DRUCE. "I presume this is one of the many named varieties of *longifolia* with lanceolate leaves, but it is unknown to me. If of hybrid origin—and a little more glabrous—the shape of the leaf would suggest *longifolia* × *piperita*."—C. E. SALMON.

Mentha sativa, L. Probably a variety of *M. paludosa*, Sole. When growing, looking more peculiar than when dried. Banks of Rea Brook, Meole Brace, Shropshire, v.-c. 40, Sept. 14, 1912.—J. C. MELVILL. "Not *paludosa*, but one of the many forms of the hybrid *M. verticillata*, perhaps best coming under the var. *subglabra*, Baker."—G. C. DRUCE. "A glabrescent *sativa*-form (*M. aquatica* × *arvensis*)."—E. S. MARSHALL. "For *paludosa* the upper whorls should be collected into a spike. This is not so in my example, which seems certainly nearer *rivalis*. The leaves are much more glabrous than usual, and it may be var. *subglabra*, a form I am not familiar with."—C. E. SALMON.

× *Mentha verticillata*, var. *paludosa*, Sole. [Ref. No. 65.] Ditch, Tiptree Heath, Essex N., v.-c. 19, Sept. 1, 1912. I sent specimens of

this gathering to Mr Druce in October, and he remarks 'There seem to be two varieties here, both probably × *verticillata*, but the one with the long flowering stems is *paludosa*, Sole. The other is very young and may be an *arvensis* form.' The plants in this parcel grade so imperceptibly into each other, and the wide based leaves are almost exclusively on lateral shoots in mature pieces, so I suspect that these broad-leaved specimens are specially strong, mere shade-grown young plants which would on elongating come nearer type. This will be obvious in examining the whole parcel but not single sheets, so hardly worth publishing.—G. C. Brown. "My specimen comes under var. *paludosa*, Sole, but mixed gatherings should not be sent."—G. C. Druce. "In var. *paludosa*, the upper whorls of the inflorescence are collected into a spike. In my specimen the whorls are mostly axillary. I should have thought best placed under *M. sativa*, L., which some authorities consider to be *M. aquatica* × *arvensis*."—A. B. Jackson.

Origanum vulgare, L., variety, floribus albis. Among debris of old quarry, north side, Craig Breidden, Montgomeryshire, N. Wales, Aug. 5, 1912. I sent a year or two ago to the Club a few examples of this white flowered variety of the wild Marjoram, and now venture to supplement them with others.—J. C. Melvill. "Yes, the var. *albiflorum*, Lej. It appears to keep distinct in culture and almost certainly hybridises with the type."—G. C. Druce. "An albino; I have observed it, though rarely."—E. S. Marshall. "To be met with frequently on the Great Scar Limestone in the West Riding of Yorkshire."—J. Cryer.

Calamintha grandiflora, Moench. Border of wood, Apesdown, Isle of Wight, v.-c. 10, Sept. 3, 1912.—W. C. Barton. "Yes; *Satureia grandiflora*, Scheele."—G. C. Druce.

Calamintha montana, Lam. Leaves in May; flowers in Aug. 1912. Gt. Wymondley Road, Hitchin, Herts.—J. E. Little. "Yes; *Satureia Calamintha*, Scheele."—G. C. Druce.

Calamintha Nepeta, Savi. Dry roadside bank, Haffield, near Ledbury, v.-c. 36, Aug. 3, 1912.—S. H. Bickham. "Yes; *Satureia Nepeta*, Scheele."—G. C. Druce.

Scutellaria galericulata, L., var. *pubescens*, Benth. Stony shore, Fife coast, v.-c. 85, July 20, 1912. Fide A. Bennett.—McT. Cowan, jun. "If correct, this is a pretty poor 'variety,' the situation (a stony shore) quite accounts for the not very marked pubescence."—E. S. Marshall. "Yes; although not so hairy as my Galloway specimens; but the degree of pubescence is not a strong

character. This plant has a facies of its own quite unlike our river-side specimens of the Midlands. I believe it to be a good variety, for which I suggest the name *litoralis*, characterised by its short (15-25 cm.) stature, more crowded and somewhat smaller leaves, and by its larger flowers with broader corolla-lip, and by its being more pubescent than the type. I have it from the coast of Wigton, Kirkcudbright, Berwick, and from the shores of Loch Ness. Mutel, not Bentham, is the authority for the var. *pubescens*. Even when our Midland *galericulata* grows in brickwork, it is not like this plant."—G. C. DRUCE.

Prunella laciniata, L. Pyrford golf course, Surrey. Detected by the keen eyes of Lady Davy, and kindly shown by her to me, but the plant was then going over, as the corollas appear to be of shorter duration than those of *vulgaris*. July 1912.—Lady DAVY and G. C. DRUCE.

Stachys palustris × *sylvatica* = *S. ambigua*, Sm. Wet place by railway station, Coniston, N. Lancs, v.-c. 69, Sept. 1912.—J. COMBER. "Yes."—G. C. DRUCE. "Certainly; but considerably nearer to *S. palustris*, which is unusual, according to my experience."—E. S. MARSHALL. "Leaves much narrower and less cordate, and petioles shorter, than in the plant figured in Smith's *English Botany*, plate 2089, but agrees with the figure in Reichenbach *Icones*, vol. xviii., t. 715, II. This is probably a hybrid between the species named, but much nearer *S. palustris* than *S. sylvatica*."—A. B. JACKSON.

Stachys ——? Hordle, Hants, Sept. 7, 1912. Sent for the opinion of botanists. I have suggested *S. Betonica* × *palustris* on the ground that the outline of the leaves seems intermediate, as well as the arrangement of verticillasters in the head. It may be merely an overgrown *S. Betonica*, due to the late season and excess of moisture.—L. CUMMING. "I fail to see the presence of *S. palustris* in these specimens of *Stachys officinalis*, Trev."—G. C. DRUCE. "A slender, drawn-up *S. officinalis*, Trev. (*Betonica*, Benth.), looking as if it had grown among bushes, or in long grass. No sign of *S. palustris*."—E. S. MARSHALL. "Surely pure *Betonica*. Where is *palustris?*"—C. E. SALMON. "I do not see how this can be separated from *S. Betonica*."—A. B. JACKSON.

Galeopsis intermedia, Vill. Hedgerow of G. N. Ry., Camb. Branch, near Hitchin, Herts, July, Sept. and Oct. 1912.—J. E. LITTLE. "Under var. *angustifolia*, Ehrh."—G. C. DRUCE. "*G. Ladanum*, L., ssp. *angustifolia* (Ehrh.) Gaud., forma foliis latioribus leviter accedens ad ssp. *intermedium* (Vill.) Briq."—A. THELLUNG.

Galeopsis angustifolia, Ehrh. Cultivated ground near Hitchin, Herts, Sep. 1912. The pubescence of the leaves varied greatly. Some were quite grey (? *G. canescens*, Schultes); some much nearer to *G. intermedia*. In two of the areas *G. intermedia* and *G. angustifolia* both occurred with every stage of intermediate.—J. E. LITTLE. "Very good var. *canescens*, Schultes."—E. S. MARSHALL.

Galeopsis Ladanum, L., var. [Ref. No. 5240.] Arable chalk fields, Moulsford, Berks, Aug. 1912. I await M. Briquet's determination.—G. C. DRUCE. "This is *G. angustifolia*, Ehrh., under var. *canescens*, Schultes, though not extreme."—E. S. MARSHALL.

Galeopsis Ladanum, L., var. *intermedia* (Vill.). [Ref. No. 810.] Waste ground near Friockheim, Forfarshire, v.-c. 90, Sep. 9, 1912.—R. and M. CORSTORPHINE. "Yes, beautifully dried. I think *G. Ladanum*, L. (sensu stricto) = *G. intermedia*, Vill.; a distinct species."—E. S. MARSHALL. "*G. Ladanum*, L., ssp. *intermedia* (Vill.) Briq."—A. THELLUNG.

Lamium. (?) Waste ground, Silverdale, v.-c. 60, June 1912. Growing in close association with *L. purpureum*, L.—J. CRYER. "This is, I believe, a form of *L. hybridum*, Vill., simulating *L. molucellifolium*, Fr. (*intermedium*, Fr.) in habit, but distinguishable by the smaller corolla, with a short tube. I have plants like these from near Wexford, Ireland."—E. S. MARSHALL. "I should say *L. hybridum*, grown in rich soil."—J. A. WHELDON. "I cannot see a ring of hairs in the tube, so conclude this is *L. incisum*."—C. E. SALMON. "*L. hybridum*, Vill., which antedates *L. incisum*."—G. C. DRUCE.

Lamium hybridum, Vill. Cultivated ground, Hitchin, Herts, March 1912. Cleistogamous state. The entomophilous state begins about the end of April. The plant then is more ascending. [Dec. 9th. The plant is again in cleistogamous state.]—J. E. LITTLE. "Yes."—E. S. MARSHALL.

Lamium amplexicaule, L., var. *clandestinum*, Reichb. (*L. rudimentarium*, Pons.). Waste ground, Walton, S. Lancs., v.-c. 59, Aug. 1912.—J. A. WHELDON. "Reichenbach says (*Fl. Germ. Excurs.*, 321, 1831)—'Sub pluviis enatae plantulae saepe corollam non explicant: *L. amplexic. clandestinum*, Reichb., *Pl. Crit.*, viii., ic. 950.' One would imagine that a good deal of this form was produced in 1912!"—C. E. SALMON. "The clandestine condition of Labiates can scarcely be called a variety."—G. C. DRUCE.

Teucrium Botrys, L. Near Sapperton, v.-c. 33, Sep. 1912. Coll., W. J. Greenwood. See *Journ. Bot.* 1912, p. 315.—H. J. RIDDELSDELL.

Ajuga Chamaepitys, Schreb. Cultivated ground, near High Down, Hitchin, Herts, Sep. 20, 1912. The scent of pine-oil is very noticeable in the fresh plant. In another locality, near Hitchin, the plants were very much smaller, and only occasionally branched.—J. E. LITTLE.

Plantago Coronopus, L., var? [Ref. No. 4.] Sandy bank, St Osyth Marshes, Essex N., June 25, 1912. Sandy bank dividing two marshes, quite unmixed with the type which occurs abundantly on sandy soil near by, and on other parts of the bank. The greatly enlarged sepals can hardly be the effect of insect infestation, as there was no mixture with the type in this patch, although I noticed a few stray plants of the variety some yards away.—G. C. BROWN. "I think it is a monstrous condition, perhaps due to a gall. I have asked Prof. Trail's opinion. He says it is due to a mite, *Eriophyes barroisii*, Focken."—G. C. DRUCE.

Plantago maritima, L., narrow-leaved form. Beach, Newquay, West Cornwall, v.-c. 1, Sept. 1912.—C. C. VIGURS.

Plantago lanceolata, L. Waste ground, Askham, v.-c. 69, Aug. 9, 1912. Is this gall-influence, viviparity, monstrosity, or what?—D. LUMB.

Plantago major, L., var. *intermedia*, Gilib. [Ref. No. 760.] Pasture, Merton parish, Surrey, July 20, 1912.—C. E. BRITTON.

Scleranthus annuus, L., dwarf form. Wall top, Haverthwaite, N. Lancs, v.-c. 69, Sept. 1912.—J. COMBER. "Var. *hibernus*, Reichb. = *S. biennis*, Reuter."—E. S. MARSHALL. "The situation may account for this pretty, condensed state of *annuus*."—C. E. SALMON.

Scleranthus annuus, L., var. *hibernus*, Reichb. (*S. biennis*, Reuter.) [Ref. No. 650.] Among turf, Ripley Green, Surrey, June 2, 1912.—C. E. BRITTON. "I think this Surrey form which I have collected with Lady Davy to be a distinct variety, but I have not yet been able to match it."—G. C. DRUCE. "This is interesting. I admit the calyx segments of fruit are shorter than those in Mr Comber's plant, but I think this should perhaps be left under type. All my examples of this variety have a different habit with extremely short internodes, and even shorter calyx teeth."—C. E. SALMON. "This seems to me to be the type rather than the variety; the root is apparently

annual, and I have never seen *biennis* so large or so spreading."—E. S. MARSHALL.

Chenopodium opulifolium × *C. serotinum.* ? Fazackerley, South Lancs., v.-c. 59, Sept. 1912. The 20 samples collected, large though some of them are, are only side branches from one immense plant, and as many were left to ripen fruit, but were cut down by the proprietor of the field. The two suggested parents were present, and this gigantic individual seemed to be almost exactly intermediate.—J. A. WHELDON. "No, this is *C. opulifolium.* Schrad., with somewhat greener foliage."—J. MURR. "My set of *Chenopodium* is at Cambridge just now, so I cannot compare this with specimens; but I think that it is only *C. opulifolium.* A hybrid with *C. ficifolium* would, surely, have much longer leaves; and I can detect no sign of this species in the plant before me. *C. album* × *opulifolium* is possible, but not probable."—E. S. MARSHALL.

Chenopodium album, L. [Ref. No. 5223.] Port Meadow, Oxford, Aug. 1912.—G. C. DRUCE. "*C. album,* L., type."—J. MURR.

Chenopodium serotinum, L. Canal bank, near Ford, S. Lancs., v.-c. 59, Aug. 24, 1912.—W. G. TRAVIS. "No, this is *C. album,* L., sub-species *viridescens,* St Am., slightly verging towards sub-species *subficifolium,* Murr."—J. MURR. "No; an *album* variety, probably under *C. paganum,* Reichb. The application of the name *C. serotinum,* L., to *C. ficifolium,* Sm., is very questionable indeed."—E. S. MARSHALL.

Chenopodium botryodes, Sm. In quantity round a pool on Lihou Island, Guernsey, Aug. 13, 1912. The small upright plants were growing in water at the edge; the larger procumbent plants on the shingle near. The largest I saw was 30 inches in diameter.—W. C. BARTON. "Yes; typical."—E. S. MARSHALL. "Yes; the only habitat in the Channel Isles. Rouy sinks it to a variety as *crassifolius* in the *Flore de France,* but I think without justification."—G. C. DRUCE.

Atriplex hastata, L., var. *prostrata,* Bouch. ? Sandy ground, Formby, S. Lancs., v.-c. 59, June 29, 1912.—W. G. TRAVIS. "Too young to name definitely; but I never saw *A. hastata* anything like so slender or so small leaved. Probably a maritime form of *A. patula.*"—E. S. MARSHALL.

Salicornia perennis, Mill. Mud flats, Hayling Island, South Hants., v.-c. 11, Aug. 1912.—J. COMBER. "Yes."—G. C. DRUCE. "Doubtless right, but gathered too early."—E. S. MARSHALL.

Salicornia——? (Plant grey green). Amongst mud and stones, constantly submerged, Hayling Island, South Hants, v.-c. 11, Aug. 1912.—J. COMBER. "A small state of *S. europaea*, L., forma *stricta*, Moss."—E. S. MARSHALL.

Salicornia——? (Plant bright green, turning red). On grass, seldom submerged, mud flats, Walney Island, N. Lancashire, v.-c. 69, Sep. 1912.—J. COMBER. "Small form of *S. europaea*, L."—C. E. Moss. "*S. europaea*, L., forma *patula*, Moss, I think. Dr Moss tells me that he has occasionally seen this species turning red late in the season; usually it becomes yellowish."—E. S. MARSHALL.

Salicornia europaea, L., forma *stricta*, Moss. Mud flats, constantly submerged, Hayling Island, South Hants., v.-c. 11, Aug. 1912.—J. COMBER. "Of the two specimens before me one is *S. europaea* × *ramosissima*; the other may be this hybrid; but if so it is nearer *S. europaea*. This hybrid is rather common on the shores of Hayling Island."—C. E. Moss. "Yes, it abounds there."—E. S. MARSHALL.

Salicornia europaea, L., forma *stricta*, Moss. (Plant bright green). Mud flats, constantly submerged, Walney Island, North Lancashire, v.-c. 69, Sep. 1912.—J. COMBER. "Yes."—C. E. Moss.

Salicornia prostrata, Pall. On mud, seldom submerged, Walney Island, N. Lancashire, v.-c. 69, Sep. 1912.—J. COMBER. "*S. europaea*, L., forma *patula*."—C. E. Moss.

Salicornia disarticulata, Moss. [Ref. No. 957.] Brightlingsea Creek, Essex N., v.-c. 19, Sep. 28, 1912.—C. E. BRITTON. "The single specimen before me shows traces of *S. gracillima*. *S. disarticulata* hybridises rarely. The other specimens I have seen which suggest hybridisation are some on a sheet in *Herbarium Linton*. Mr Linton's specimens exactly match this one of Mr Britton's. Some of the other herbaceous species of *Salicornia* hybridise very freely."—C. E. Moss. "Excellent specimens, and very typical."—E. S. MARSHALL.

Polygonum lapathifolium × *Persicaria*. Ditch by Radyr Church, v.-c. 41, Aug. 1912. Spike greenish pink; glands of perianth few; perianth veins sometimes well marked; lower ocreae more or less fringed. Intermediate and probably the hybrid. The plants sent are all of one stage, but others occurred of intermediate character.—H. J. RIDDELSDELL. "This is a nearly eglandular state of *P. lapathifolium* and but for the well developed seeds it might have been regarded as a cross between that and *P. Persicaria*. Despite the strongly ciliate ochreae and the paucity of glands on the perianth, I think it must go to *P. lapathifolium* on account of the seeds, which

have a depression on both faces, and no raised line as in *P. Persicaria.*" —J. A. WHELDON. "Is this not a form of *P. lapathifolium* according to British authors; there are a few glands on the perianth, and the seed is not trigonous."—G. C. DRUCE.

Polygonum Persicaria, L., var. ? [Ref. No. 37.] Grand Havre, Guernsey, Aug. 14, 1912. A remarkably close procumbent plant growing at the side of a cart track—about forty plants all of the same growth.—W. C. BARTON. "This probably comes under the var. *ruderale* (Salisb. *Prod.*, 259), Meisner in DC. *Prod.*, 118."—G. C. DRUCE.

Polygonum minus, Huds. Shallow ditches, Barnard's Green, near Malvern, v.-c. 37, Sept. 17, 1912.—S. H. BICKHAM and R. F. TOWNDROW.

Polygonum aequale, Lindm. [Ref. No. 5226.] Near Lacey Green, Bucks, Aug. 1912.—G. C. DRUCE. Determined by Dr LINDMAN to be *P. aequale* × *calcatum.*

Polygonum aviculare, L., var. [Ref. No. 44.] Lerée, Guernsey, Aug. 13, 1912.—W. C. BARTON. "Is a form of *P. aequale*, Lindm."—C. E. LINDMAN.

Polygonum aequale, Lindm. (?). [Ref. No. 4908.] Loch Leven, Kinross, Aug. 1912.—G. C. DRUCE. "Is *P. heterophyllum*, Lindm., var. *boreale*, Lange."—C. LINDMAN.

Polygonum aequale, Lindm. [Ref. No. 5001.] Stanton St. John, Oxford, with the foregoing and perhaps a hybrid of it, Aug. 1912.—C. LINDMAN and G. C. DRUCE. Dr Lindman later on reported that 'I now prefer to say *P. heterophyllum*, paulo cum *P. aequali mixtum.*

Polygonum heterophyllum, Lindm. [Ref. No. 5002.] Near Stow Wood, Oxon, Aug. 1912.—C. LINDMAN and G. C. DRUCE. "Yes; var. *genuinum* (excepto perigonio paulum abbreviato)."—C. LINDMAN.

Polygonum heteropyllum, Lindm. [Ref. No. 5000.] Stanton St. John, Oxford, Aug. 1912, see *Report* 1912, p. 177.—C. LINDMAN and G. C. DRUCE. "Yes, *genuinum.*"—C. LINDMAN.

Polygonum heterophyllum, Lindm. (?) [Ref. No. 5009.] Frilford, Berks, Aug. 1912.—G. C. DRUCE. "A form of *P. aequale*, Lindm."—C. LINDMAN.

Polygonum aviculare, L., var. *agrestinum* (Jord.). Stream bank, Mollington Meadows, near Chester, June 19, 1912, and lane side,

near Mickle Trafford Station, Cheshire, v.-c. 58, July 16, 1912.—C. WATERFALL. "Bad specimens of *P. heterophyllum*, Lindm."—G. C. DRUCE.

Polygonum Roberti, Lois. Duddon Estuary, Askham, v.-c. 69, Sep. 13, 1912. I can't understand why the books say that the leaves of this plant are flat. In *Bab. Manual* the word is in italics. Mr Hodson, *Flora of Cumberland*, says that the plant which called into existence the trivial *Raii*, was gathered on a part of the Cumberland coast not far from here.—D. LUMB. "Yes, a new county record for 69."—G. C. DRUCE. "Is not this *P. Raii*, Bab., rather than *P. Roberti*, Loisel.? The latter is a small-fruited (2 to 3 mm. long) plant with a distribution distinctly south European. Mr Lumb's plant possesses large (4 × 3 mm.) exserted fruit. In descriptions of *P. Raii*, it is usually stated that the leaves are *flat*, but my experience leads me to believe that the margins of the leaves may frequently be *recurved*, as in *P. litorale*, Link, and Mr Lumb's plant shows these recurved margins."—C. E. BRITTON. "*P. Raii*, Bab. Loiseleur's species is a plant of southern Europe."—E. S. MARSHALL.

Rumex crispus, L., var. *trigranulatus*, Syme. 'Slacks' in the sand dunes, Birkdale, S. Lancs., v.-c. 59, July 7, 1912."—J. A. WHELDON. "Yes; *trigranulatus* is a common littoral form."—G. C. DRUCE and E. S. MARSHALL.

Rumex crispus × *sanguineus*, var. *viridis* (*R. crispus* × *nemorosus*). [Ref. No. 779.] Lower Morden, Surrey, July 24, 1912.—C. E. BRITTON. "Looks right; but gathered a fortnight too early to show the fruiting character."—E. S. MARSHALL. "Yes; apparently the × *R. Sagorskii*, Haussknecht."—G. C. DRUCE.

Rumex rupestris, Le Gall. Origin, Whitesand Bay, Cornwall, cult., at Clifton, July 1912.—J. W. WHITE.

Rumex Acetosella, L., forma *stolonifera*. The normal form is abundant on a stretch of sandy railway bank about seven miles from Rugby. In places the surface soil seems composed of engine cinders, and on these patches alone the plant becomes stoloniferous, plants growing on sandy soil a foot away being quite normal.—L. CUMMING. "The rhizomatous character of this species has been alluded to (*Journ. Bot.*, 1892, p. 262) by the Rev. E. F. Linton. As my specimen is only the male plant, I am unable to say to which variety it belongs."—G. C. DRUCE. "The species is normally stoloniferous, as those whose gardens it invades have too good cause to know."—E. S. MARSHALL and J. A. WHELDON.

Rumex Acetosella, L., var. *acetoselloides*, Bal. Nash Common, Bucks, June 1912. In this form the calyx is not adherent to the seed, as in *angiocarpus*, which is the common British plant.—G. C. DRUCE.

Euphorbia dulcis, L. [Ref. No. 775.] In large patches, quite naturalised, by the banks of the Isla, above the Kirkton, v.-c 90, May 21, 1912.—R. and M. CORSTORPHINE. "Yes."—G. C. DRUCE and A. THELLUNG.

Euphorbia Paralias, L. For two or three miles between Haverigg and Millom, Cumberland, this plant grows in the greatest abundance; it and the Marram constitute almost the whole of the vegetation. Sept. 28, 1912.—D. LUMB.

Euphorbia portlandica, L. Rocks above Oddicombe Beach, April 8, and from dry gravelly hillside meadow, Torquay, S. Devon, v.-c. 3, April 17, 1912.—C. WATERFALL.

Buxus sempervirens, L. Chalk Hills, Happy Valley, Kimble, Bucks, May and June 1912. I thought some members might like to have these specimens of box with fruit and flower from this 'locus classicus.' In the box woods in the Happy Valley and on the Velvet Lawn (both in Chequers Park) the trees grow often 20 feet high. The trunk of one in our garden has a girth of 6 feet just above the ground, after which it divides. The fruit is popularly called here 'Pots and Kettles.'—F. L. FOORD-KELCEY.

Mercurialis perennis, L., var. *ovata*, Steud. [Ref. No. 347.] Shrubbery, Malvern Wells, v.-c. 37, April 26, 1912; coll., R. F. Towndrow; comm., S. H. BICKHAM. "If correctly named, surely a very weak variety."—G. C. DRUCE.

Ulmus scabra, Miller, *forma*. [Ref. No. U 1.] By Feeder, Llandaff, v.-c. 41, May 11 and Aug. 13, 1912. A long-leaved form; also U 2, field near Fairwater, v.-c. 41, April 27 and Aug. 14, 1912.—H. J. RIDDELSDELL. "Yes; *U. montana*, Stokes."—A. HENRY. "Yes; I think under *U. scabra*, Mill *(U. glabra*, Huds.)."—A. B. JACKSON.

Ulmus montana, With. Seedlings. Millwood, Dalton-in-Furness, v.-c. 69, Sept. 30, 1912.—D. LUMB. "Seedlings are difficult to identify with certainty. The *U. montana* seedling has two small leaves, and is probably a hybrid."—A. HENRY.

Ulmus scabra, Mill. [Ref. No. U 3.] Road from Radyr to Fairwater, v.-c. 41, April 27 and Aug. 14, 1912.—H. J. RIDDELSDELL.

"This is not true *U. montana*, Stokes, as it has leaves smooth and with longer petioles than usual. It probably is of hybrid origin, *U. nitens* × *U. montana*, but very close to *U. montana* in samara, thick pubescent twigs, buds."—A. HENRY. "Very imperfect material, but apparently coming under *U. scabra*, Miller (*U. glabra*, Huds., *U. montana*, Stokes)."—A. B. JACKSON.

Ulmus glabra, Huds., var. *major* = *Ulmus hollandica*, Sm. Chalk soil, Happy Valley, Kimble, Bucks, July 1912.—F. L. FOORD-KELCEY. "*Ulmus major*, Smith."—A. HENRY. "These specimens show well the suberosity of the lower branches, but this character is of no value for distinguishing elms. This is no doubt the *Ulmus major* of Smith and is now generally considered to be *U. montana*, Stokes × *glabra*, Miller. Dr Moss regards it as *U. hollandica*, Miller. It is one of our most distinct elms."—A. B. JACKSON.

Ulmus glabra, Mill. Seedlings. Millwood, Dalton-in-Furness, v.-c. 69, Sep. 30, 1912.—D. LUMB. "Probably correct."—A. HENRY.

Ulmus glabra, Miller. Type? [Ref. No. 15.] Oliver's Farm, Stanway, Essex N., July 12, 1912. I submitted several gatherings of *Ulmus* to Dr E. G. Gilbert of Tunbridge Wells, and of this he says, 'Perhaps the only pure *glabra*.' These specimens agree exactly with descriptions of the type, their smooth, shining leaves being specially noticeable in nature.—G. C. BROWN. "*Ulmus nitens*, Moench (*U. glabra*, Miller)."—A. HENRY. "Best left under *U. glabra*, I think, but leaves different in texture and form of toothing to the Stutton plant, reported on elsewhere."—A. B. JACKSON.

Ulmus. [Ref. No 5224.] Castle Hedingham, Essex N., Oct. 1912. A form, I suppose, of Miller's *U. glabra*.—G. C. DRUCE. "*Ulmus nitens*, Moench, *forma*."—A. HENRY. "The small-leaved Elm, *U. sativa*, Miller, I believe."— A. B. JACKSON.

Ulmus ——? [Ref. No. 5212.] Near Sawbridgeworth, Essex, Oct. 1912.—G. C. DRUCE. "This is a form of *U. nitens*, Moench (*U. glabra*, Miller)."—A. HENRY. "*U. glabra*, Miller, I believe."—A. B. JACKSON.

Ulmus glabra, Miller. [Ref. No. 14.] From a pendulous-branched tree, Stutton, Suffolk E., v.-c. 25, July 11, 1912.—G. C. BROWN. "*Ulmus nitens*, Moench (*U. glabra*, Miller)."—A. HENRY. "Typical *U. glabra*, I should say. *U. nitens*, Moench, according to Dr C. E. Moss."—A. B. JACKSON.

Ulmus sativa, Mill. [Ref. No. 845.] West Barnes, Merton, Surrey, Aug. 28, 1912. One tree of this, the small-leaved elm, in a

pasture, with several trees of *U. glabra*, Mill. *(U. nitens*, Moench). The first tree of this species that I have met with in Surrey. Detected too late in the season to secure fruiting examples.—C. E. Britton. "This is a peculiar elm, possibly one of the numerous hybrids. It resembles, in shape of leaves, Goodyer's elm (the latter considered to be *U. minor*, Miller, and which Dr. Moss calls *U. sativa)*, but has much more pubescent twigs, and differs in the axil tufts of the leaves, &c. It may be possibly named *U. minor*, var."—A. Henry. "Apparently correct."—A. B. Jackson. "I differ from Dr Moss in calling this elm *U. sativa*, Mill."—G. C. Druce.

Ulmus stricta, Lindley (*Ulmus Wheatleyi*, Hort.). [Ref. No. 4771.] Near Thornborough, Bucks, July 1912. — G. C. Druce. "*Ulmus nitens*, Mœnch, var. *Wheatleyi*. This is the Wheatley elm of nurseries, very close to but distinct in habit and leaves from the true Cornish elm *(U. nitens*, var. *stricta)*. It is a pyramidal tree, very regular in form. It is possibly, but not certainly, the same as *Ulmus sarniensis*, Loddiges. It is occasionally called the Jersey or Guernsey elm."—A. Henry. "I have a plant similar to this in my herbarium, which Mr Augustine Henry calls a French form of *U. nitens*, Mœnch *(U. glabra*, Miller). It is apparently what is known as *U. campestris* in France and elsewhere on the Continent, where our English elm is unknown."—A. B. Jackson.

Ulmus sativa, Miller (= *U. glabra*, Miller, var. *minor*, Miller, of A. Ley). [Ref. No. U 4.] A row of trees planted in Pencisely Road, Llandaff, v.-c. 41, Aug. 22, 1912. I think rightly named. A probably native specimen was found high up in the hills of Glamorganshire. (See *Report* 1911, p. 121.)—H. J. Riddelsdell. "*Ulmus nitens*, Moench, var. *stricta* = *U. stricta*, Lindley. The Cornish elm, identical with the wild tree in Cornwall."—A. Henry.

Ulmus vegeta, Ley, = *U. glabra*, Miller × *montana*, Stokes. Two trees by roadside near Shepperton, Surrey, v.-c. 17, May 5, 1912.—A. B. Jackson and J. Fraser. "At first thought to be a form of the Huntingdon elm and distributed under that name but I think only a form of the Wych Elm."—A. B. Jackson.

Urtica dioica, L., var. *angustifolia*, Ledeb. North Stoke, Oxon, Sep. 1912. Growing with but keeping distinct from the type, than which it was less 'pungent' as I gathered these without being stung. —G. C. Druce.

Betula tomentosa, Reith. and Abel. Seedlings. Millwood, Dalton-in Furness, v.-c. 69, Sep. 30, 1912. I am not sure about this determination.—D. Lumb. "*B. pubescens*, Ehrh."—E. S. Marshall.

Salix purpurea × *viminalis* = *rubra*, Huds. Formby, S. Lancs., v.-c. 59, June 29, 1912.—W. G. Travis. "The broad-leaved form of *S. purpurea* × *viminalis*, which is rather nearer *S. purpurea* of the two parents. Distinguished as *S. rubra*, var. *Forbyana* (Sm.)."—E. F. Linton.

Salix aurita, L. ♀ and ♂. Burleigh Meadows, Langley, near Hitchin, 1911, 1912.—J. E. Little. "Yes."—E. S. Marshall. "Right."—E. F. Linton.

Populus alba, L., ♀. On right bank of the Hiz, in Beds, Cadwell Bridge, near Ickleford, Herts; March, May and June, 1912. A fine old tree. Height, 78 feet, 6 inches. Girth at 4 feet from ground, 12 feet, 4 inches. Spread, 73 feet. Being old, the leaves are small, with little trace of lobing. One of its suckers has grown into a small tree 10 feet high, with more lobed leaves. We have eight other large *P. alba* in the district, in Herts.—J. E. Little. "Correct, I believe. Mr Little notes that the tree from which these specimens was taken is 80 feet high, which is unusually large for *P. alba*, but I saw some fairly good specimens at Hampstead last autumn."—A. B. Jackson.

Populus canescens, Sm. × *tremula*, L. ♀ (fide C. E. Moss). Grove Road, Hitchin, Herts. March, April and June, 1912. Height, 40 feet (has lost its top). Girth at 4 feet from ground, 4 feet, 4 inches. Spread, 33 feet. Stigmas pink, not so dark as *P. tremula*, and differing in form.—J. E. Little.

Populus tremula, L. ♂. Little Wymondley, near Hitchin, Herts, Feb. 28 and Sep. 9, 1912.—J. E. Little.

Populus tremula, L. ♀. Lane between Grove Mill, Hitchin, and Hyde Mill, Ickleford, Herts. Feb. 24 and June 30, 1912.—J. E. Little.

Populus nigra, L., var. *betulifolia*, ♀ (fide C. E. Moss). Left bank of stream, at lower end of Dalham Village, W. Suffolk, near a *P canescens*, Sm. Height, about 100 feet. Spread, 40 feet. Lower branches drooping below the horizontal. May 11 and Sept. 25, 1912.—J. E. Little. "Yes; very good examples of the true Black Poplar. The shoots are pubescent, which is a distinguishing character of the variety *betulifolia*. It is the common form in this country. On different trees, however, the pubescence varies very much in quantity."—A. B. Jackson.

Populus nigra, L., var. *betulifolia*. Cuxham, Oxford, June 1912. Not quite typical, as they do not show in all cases the characteristic

thick pubescent twigs, but they have the correct shape of leaf, and pubescence on leaf and petiole; teste A. Henry.—G. C. Druce. "Specimen poor. Very near the last, and possibly of the same origin. The Poplar known as *P. nigra* in the East of England seems to be quite different from this, judging from specimens I have received from there recently."—A. B. Jackson.

Populus deltoidea, Marsh., × *nigra*, L. Bank of the Hiz, above Cadwell Bridge, Beds, near Ickleford, Herts, Mar. 30 and May 31, 1912. One of a series of about a dozen trees, all staminate, which I have had under observation for two years, some pollarded, one or two unmaimed. I believe them all to rank together. Many of the leaves have no trace of glands at the base, but every here and there one or two are found at or near the base of the lamina. Shoots and buds are glabrous; petioles hairy; underside of the leaves glabrous. Spring leaves are largely long-acuminate, with a cuneate base, but the vigorous summer growth has an almost cordate base and a triangular outline. For this particular tree I have not yet procured the summer shoots.—J. E. Little. "Resembling very much in texture and shape of leaf a ♀ tree at Bedford Park, specimens from which I sent to the Club in 1911 under the name of *P. nigra*, but which Dr Moss, when I showed him the tree last summer, considered might possibly be *P. deltoidea* × *P. nigra*, var. *viridis*. See *Report* 1911, p. 126."—A. B. Jackson.

Liparis Loeselii, Rich. Chippenham, Cambridgeshire. Coll., A. Fryer; ex-herb. G. C. Druce.

Helleborine latifolia, Druce. Gatcombe Wood, Minchinhampton, v.-c. 34, Aug. 14, 1912. Coll., E. M. Day. These are sent to illustrate the difficulty of fitting our forms to the received descriptions. None of these specimens have the orthodox 'smooth bosses' of the species, though they vary greatly in depth of furrows and amount of roughness. The plants are clearly *H. latifolia*. Much scarcer with us in Gloucestershire is var. *media*, E. S. Marshall, the bosses of which show no essential difference from the type, nor do the flower bracts.—H. J. Riddelsdell. "In *H. latifolia* the bosses are smooth. I believe this to be fine *H. atroviridis*, W. R. Linton."—E. S. Marshall. "The habit, shape and texture of leaf, smaller flowers, etc., seem to point to var. *media* rather than typical *latifolia*."—C. E. Salmon. "A mixed gathering. Two samples were *E. latifolia*, All., one was probably *E. atro-rubens*, Hoffm., and several were intermediates. The specimens were however not well prepared for accurate determination."—J. Cryer.

Narcissus sp. Field on slope near Llanedeyrn, v.-c. 41, April 15, 1912. Flowers all double, mostly greenish, sometimes very green, but

usually drying a rich yellow; degenerate. I suppose a form of double *Narcissus Pseudo-Narcissus*, L. The same form occurred in a field corner near Penard, Gower.—H. J. RIDDELSDELL. "May be *N. odorus*, L., but I cannot find my Cornish examples, for comparison."—E. S. MARSHALL. "Not *odorus*, L. Mr Riddelsdell's suggestion is probably correct."—G. C. DRUCE.

Narcissus biflorus, Curt. Naturalised in a meadow at Brompton Ralph, near Wivelscombe, Somerset, May 1912.—Coll. for F. L. FOORD-KELCEY.

Leucojum aestivum, L. River Loddon, Twyford, Berks, May 5, 1912.—A. WEBSTER.

Maianthemum bifolium, Schmidt. Hampstead, June 15, 1912. A single patch in a private wood, apparently native. It has been known here for at least a century, and there are no records of its introduction.—A. B. JACKSON.

Allium Babingtonii, Borr. Newquay, W. Cornwall, v.-c. 1, July 21, 1912. Bulb somewhat irregularly shaped, with a groove separating it more or less into two halves about two inches by one and a half inches, white. One group of plants I have watched several years flowered this year for the first time. I know of five stations in my locality, all apparently quite native ones.—C. C. VIGURS.

Scilla hispanica, Mill. *(campanulata*, Ait.). [Ref. No. 3694.] Naturalised on the border of a copse at Stoke St Mary, S. Somerset, v.-c. 5, May 1911 and 1912.—E. S. MARSHALL.

Lilium pyrenaicum, Gouan. Hedge-banks in a lane at the foot of Sheepwash Hill, near Molland, N. Devon, v.-c. 4, May 31, 1912. It has considerably increased since Syme's *English Botany* was published, and now extends for about 200 yards. Mr James Britten and I found another small colony almost at the top of the hill, quite three-quarters of a mile away.—E. S. MARSHALL.

Lilium Martagon, L. In great abundance and luxuriance in a wood at Kingston Bagpuze (See *Flora of Berkshire*, p. 497), July 1912.—G. C. DRUCE.

Juncus conglomeratus, L., var. *laxus*, Aschers. and Graebn., *Syn.* ii., 2, 445, 1904. [Ref. No. 4972.] Anglesey, July 1912. Varying in its degrees of diffuseness; simulating *effusus* in its more open panicles. The fruit and stem-striations are, however, typical of *conglomeratus*, and I do not think these plants are hybrids by buds.—G. C. DRUCE.

Juncus articulatus, L. Waste ground, Askham, v.-c. 69, Aug. 9, 1912. Is this gall-influence, viviparity, monstrosity, or what?—D. LUMB. "This is a frequent condition of the plant in wet places and is, I believe, due to a gall which Prof. Trail tells me is *Livia juncorum*, an insect belonging to the Hemiptera Homoptera."—G. C. DRUCE.

Juncus bulbosus, L., var. *Kochii*, Druce. Woolmer Forest, S. Hants, June 1912. This variety differs from the type not only by its six stamens (a somewhat variable character), which is occasionally found in *J. bulbosus*, but by its erect tufted habit. Dr Hugo Glück tells me he considers it to be a good variety, as cultivation under changed conditions does not affect its distinguishing character. —G. C. DRUCE. "Mr Druce doubtless observed this when living as to the characters."—A. BENNETT.

Juncus bulbosus, L., var. [Ref. No. 4943.] Near Omagh, Co. Tyrone, July 1912.—G. C. DRUCE. "I should name this var. *uliginosus*, Roth, species *sub-supinus*."—A. BENNETT.

Juncus tenuis, Willdenow. Amongst a number of aliens sent me by Mr G. A. Holt, of Sale, near Manchester, were three fine examples of this species. It occurred on the banks of the Bridgewater Canal, between Stretford and Sale, but on the Cheshire side of the boundary, October 1912. Along with it was growing a congested variety, 18 inches in height. I have asked Mr Holt to procure additional examples of the type, and of the variety, as members will be glad to have this interesting species.—C. BAILEY.

Juncus bufonius, L., forma *altissima*, mihi. [Ref. No. 16.] Among long grass by pond, Little Herkesley, Essex N., v.-c. 19, July 23, 1912. This interesting form or state is much stouter and taller than any I have ever seen. Hooker gives height, 1 to 8 inches. This varies from 9 to 19 inches (circa 30-50 cm.), average 14-15 inches, and I venture to give it the name forma *altissima*, "Differt a typo in culmis altioribus (circa 30-50 cm.) ramis et ramusculis longioribus attenuatis." Mr Druce has seen this, and says, 'I think only a drawn up condition, but if you have a set for the Club there would be no reason why you should not name it as you suggest.'—G. C. BROWN. "This seems to come between the type and the var. *foliosus*, Buchenau = *J. foliosus*, Desf., a plant with stems 16 inches high and leaves 8 inches long, a native of Spain and Sardinia."—A. BENNETT. "Probably the var. *giganteus*, Aschers. and Graebn. Stem erect, 3-5 dcm., stouter and less smooth than type." —G. C. DRUCE. "*J. bufonius*, L., forma *umbrosa*, ad var *leucanthum*. A. and G. accedens"—A. THELLUNG. "I have still taller examples from near Blackpool, which I submitted to two well-known botanists. Both thought them only 'drawn' examples."—J. A. WHELDON. "Type; altered by the conditions of growth."—E. S. MARSHALL.

Juncus ranarius, Nees. [Ref. No. 4919.] Teste Prof. Graebner. See *Report* 1911, p. 35. Dr Graebner tells me that Buchenau became convinced that it was a good species. In the sandy hollows on the golf course, Pyrford, Surrey, July 1912.—Lady DAVY and G. C. DRUCE. "Opinions in this will differ; to me it is only a variety of *bufonius*."—A. BENNETT.

Luzula Forsteri, DC. Bank near Tidenham Railway Station, v.-c. 34, May 6, 1911.—H. J. RIDDELSDELL. "Yes; but I call it Juncoides."—G. C. DRUCE.

Sparganium neglectum, Beeby. [Ref. No 904.] Rescobie Loch, v.-c. 90, N.C.R., Sept. 11, 1912.—R. and M. CORSTORPHINE. "Yes; Dr Ostenfeld and I gathered it in this locality on the Brit. Ass. Excursion last September. It is a new county record."—G. C. DRUCE. "Only one specimen sent."—J. CRYER.

Scheuchzeria palustris, L. On the Moor of Rannoch, associated with *Carex limosa*, *Drosera anglica*, etc. From Mr Scarth's locality, where he discovered it in 1910. In some quantity over a limited area, and fruiting freely. I collected this in somewhat trying climatic conditions in August last, and with all care on account of its rarity; thus, with the exception of *Sagina Boydii*, I have gathered all the Scottish plants.—G. C. DRUCE. "For the discovery of the plant in Argyll, see *Notes from the Royal Bot. Garden Edinb.*, p. 57, t. 60, Jan. 1912."—A. BENNETT.

Potamogeton natans, L., *forma*. [Ref. No. 3006.] Between the Middle and Lower Lakes, Killarney, Aug. 1911. This plant, which appears always to be barren, was considered by the foreign botanists on the International Phytogeographical Excursion to be a form of the above species.—G. C. DRUCE. "No form! simply the plant coming on to maturity, and of which Fryer possessed a remarkable series."—A. BENNETT. "Apparently a deep-water form, or state, of *P. polygonifolius*."—E. S. MARSHALL.

Potamogeton natans, L., *forma*. [Ref. No. 4799.] Great Bedwyn, Wilts. The bright reddish coloured young barren form sent me, in May 1912, by C. P. Hurst; comm.—G. C. DRUCE. "Simply an early state of the species in the form that Syme named *P. polygonifolius*, var *linearis*, from the Killarney Lakes, etc."—A. BENNETT. "Is not this *P. polygonifolius*? I cannot see the joint below the lamina, characteristic of *P. natans*."—E. S. MARSHALL.

Potamogeton alpinus, Balb. Lunan Burn, near Loch Cluny, v.-c. 89, Aug. 1911.—McT. COWAN, jun.—"Yes; an ordinary form of the species."—A. BENNETT.

Potamogeton heterophyllus, Schreb. Loch Cluny, Perth, v.-c 89, Aug. 1911.—McT. Cowan, jun. "Yes."—A Bennett. "Yes; the *P. gramineus*, L., agg. forma *longipedunculata*, which I have gathered there."—G. C. Druce.

Potamogeton heterophyllus, Schreb. Lunan Burn, at Marlee Loch, v.-c. 89, Aug. 1911. Mr Bennett says, 'A dark form with much enlarged peduncles.'—McT. Cowan, jun. "Yes."—A. Bennett.

Potamogeton heterophyllus × *angustifolius*, Bercht. and Presl. Loch Rae, Perthshire, v.-c. 89, Aug. 1911.—McT. Cowan, jun. "No; this is a form of *heterophyllus* not common in Europe, but abounds in N. America, especially around the Great Lakes."—A. Bennett.

Potamogeton obtusifolius, Mert. and Koch, b. *fluvialis*, Lange and Mort. Loch Cluny, Perth, v.-c. 89, Aug. 1911.—McT. Cowan, jun. "Yes; the prevailing form in the Perthshire lochs. It is probably the *β elongata*, Cham. and Schlecht (1827) and var. *lacustris*, Fries *Herb. Nor.*, 5, No. 81, but I have not seen specimens of these."—A. Bennett.

Potamogeton pusillus, L., var. (?). Silverdale Moss, v.-c. 60, June 1910. In abundance, but could not be found in seasons 1911, 1912, although carefully searched for.—J. Cryer. "This form is tending to the var. *tenuissimus*, Mert. and Koch, but is not that var. by the type specimens, though it comes near to it. It does not exactly fit any of Fischer's numerous forms, but seems to be near his form b. *tenuifolius*, Fischer, in *Ber. Bayr. Bot. Ges.*, xi. (1907), 115 ff."—A. Bennett.

Potamogeton perfoliatus, L., var. *Richardsonii*, *Journ. Bot.* 1889, p. 25, = var. *lanceolatus*, Robbins, in Gray's *Man. of N. United States*, 1868. Mill-lade near Selkirk, alt. 350 feet, v.-c. 79, Aug. 4, 1912; teste A. Bennett.—I. M. Hayward.

Potamogeton perfoliatus, γ *oblongifolius*, Mert. and Koch. Mill-lade, Selkirk, v.-c. 79, Aug. 6, 1912; teste A. Bennett. I found this growing in great abundance under 5 to 6 feet of running water.—I. M. Hayward.

Potamogeton Sturrockii, Ar. Benn. Loch Cluny, Perth; also from Loch Marlee, v.-c. 89, Aug. 1911.—McT. Cowan, jun. "Yes; this has been found rarely in America (Morong!), and in Sable Island, Canada (Macorn!). The above is the third station for E. Perth."—A. Bennett.

Potamogeton marinus, L. Rescobie Loch, Forfar, v.-c. 89, Aug. 1911.—McT. Cowan, jun. "Mr McTaggart Cowan here uses the name *marinus*, L. There is no specimen of *marinus* (i.e. *filiformis*, Nolte) in the Linnean Herbarium, the one so named being a *pectinatus*, L., form. In another place I hope to show why we must now use Linnaeus' name, notwithstanding there being no specimen in his herbarium."—A. Bennett. "*P. filiformis*; which Mr Druce, like Nyman, identifies with *P. marinus*, L."—E. S. Marshall.

Potamogeton densus, L. Croxton-Keyrial, Leics., v.-c. 55, Aug. 22, 1912.—A. R. Horwood. "Such specimens are not worth drying unless as a new record to a county. It is one of the easiest to preserve in the genus."—A. Bennett.

Zostera marina, L. Sea sands at low tide near the Princess Pier, Torquay, S. Devon, April 11 and 16, 1912.—C. Waterfall. "As far as leaf material goes, this appears to be var. *stenophylla*, Aschers. and Graebn."—E. S. Marshall.

Scirpus caespitosus, L., var. [Ref. No. 4779.] Rannoch Moor, Perth, Aug. 1912.—G. C. Druce. "A form with the slenderness of var. *nemorosus*, Roth, but not that."—A. Bennett. "Is the var. *germanicus* (Palla) Aschers. and Graebn. See *Report* 1912, p. 180."—C. H. Ostenfeld.

Scirpus filiformis, Savi, var. *monostachys*, Syme. Abundant on a damp sandy flat east side of Littlesea, Dorset, July 18, 1912.—A. B. Jackson and C. B. Green. "This prostrate form of *S. filiformis* was found while searching for the rare *S. nanus* in its 'locus classicus.'"—A. B. Jackson.

Scirpus maritimus, L., var. *conglobatus*, Gray. Sand dunes, near Freshfield, South Lancs, v.-c. 59, Aug. 1912.—J. A. Wheldon. "= *S. maritimus*, L., var. *tuberosus*, Desf., sp. 1798; = *S. maritimus*, L., var. *compactus*, Hoffm., sp. 1804; = *S. maritimus*, L., var. *conglobatus*, Gray, sp. 1821."—A. Bennett. "Yes; the var. *conglobatus*, S. F. Gray."—G. C. Druce.

Rhyncospora fusca, R. and S. Borth Bog, Cardigan, June 21, 1910.—L. Cumming. "Recorded by the Rev. A. Ley in 1886 from the Dyfi-Estuary marshes (*Record Club Report* 1887, 148.). The opening of the estuary is only about three miles north of Borth, so the localities are not far apart."—A. Bennett.

Carex Pseudo-cyperus, L. Edge of White moor, near Ellesmere, Salop, v.-c. 40, July 3; edge of Llyn Helig, Flint, v.-c. 51, July 13, 1912.—C. Waterfall.

Carex acutiformis, Ehrh., var. *spadicea*, Roth., forma *maxima*, Urban. Rawdon Wood, near Leeds, v.-c. 64. Many specimens exceeded five feet; teste A. Bennett.—J. Cryer. "*Carex acutiformis*, Ehrh., var. *spadicea*, Roth."—L. Kükenthal. "*C. acutiformis*, Ehrh., scarcely my idea of *spadicea*, Roth., which has a prolonged beak to the glume as long as the utricle."—G. C. Druce. "I can only see *C. acutiformis*, Ehrh., type in this; the glumes are not nearly long or aristate enough for *spadicea*."—E. S. Marshall.

Carex elata, All. Silverdale Moss, v.-c. 60, June 1912. Several fine tufts.—J. Cryer. "Yes; beautiful specimens."—G. C. Druce.

Carex gracilis, Curt. Marsh near Fairwater, v.-c. 41, May 25 and June 3, 1912. The white leaf sheaths are very striking. The plant grows mostly in large clumps at one end of an extensive marsh which is rich in *Carex* forms.—H. J. Riddelsdell. "Yes; according to the *Flora* a rare species in the county."—A. Bennett. "Yes; a robust form. Rouy uses the name *C. acuta*, Good., but it is later than *gracilis*, Curtis."—G. C. Druce.

Carex gracilis, Curt., var. *tricostata* (Fr.). Askham Bogs, near York, Aug. 21, 1912. I first noticed this in Aug. 24, 1905. It is fairly plentiful in one corner of the bog. Teste A. Bennett and Rev. E. S. Marshall.—J. Cryer. "Correct."—L. Kükenthal.

Carex——? [Ref. No. 348.] Origin, Ormesby Common; cult., Ledbury, v.-c. 27, July 27, 1912. This is the plant I have previously distributed under the name of *C. trinervis*, Dégland. Mr Groves intends to send a note respecting it to the *Journal of Botany*, so I send further specimens.—S. H. Bickham. "Dried too early, but I suppose is one of the *C. trinervis* forms by the stolons."—A. Bennett. "This agrees with *C. trinervis* in many respects. My example, however, has but a single male spike, and the fruit is not in eight rows. These characters are perhaps affected by cultivation. The female spikes show no male flowers as is said to be usual, but singularly enough the solitary male spike terminates in a cluster of female flowers."—J. A. Wheldon. "Pfarrer Kükenthal thinks that it may belong to *C. trinervis*. I collected it in Norfolk in 1911, but it seems to be scarcely typical *trinervis*."—G. C. Druce.

Carex vulpina, L., var. *nemorosa*, Lej. Ditch at edge of wood between Tadlow and Wimpole, v.-c. 29, May 17, 1912. A hybrid form in habit exactly like typical *C. vulpina*. There was no suggestion of hybridity, *C. remota*, etc., not being noticed in the locality.—R. S. Adamson. "Mr Adamson is quite right in quoting this of Léjeune, who so called it in his *Revue de la Fl. en. d. Spa.*, 193, 1824.

Aschers. and Graebn. only quote it of Koch *Syn.*, ed. 2, 866, 1844."—A. BENNETT. "Yes; the var. *nemorosa*."—G. C. DRUCE.

Carex paradoxa × *paniculata* (× *C. solstitialis*, Figert.). [Ref. No. 3764.] Swamp between Barton Mills and Teklingham, Suffolk W., v.-c. 25, June 4, 1912. I gathered this in company with Dr C. E. Moss and Mr R. H. Adamson. As the two species grew together in good quantity, we were led to make a special search for their hybrid, which does not seem to have been previously detected in this country. I believe the determination to be correct; it varied considerably, the general habit being perhaps nearer to *C. paradoxa* of the two, but the characters seem fairly intermediate.—E. S. MARSHALL. "It may be, but looks very small for the *paniculata* part. If so it is *C. paradoxa* × *paniculata*. Haussk. *Irmischia*, 1881 = *C. paniculata* × *paradoxa*(× *C. solstitialis*, Figert, in *Deut. Bot. Mon.*, vii., 1889, p. 86)."—A. BENNETT. "Although the rhizome is wanting, Pfarrer Kükenthal thinks it may be the hybrid suggested."—G. C. DRUCE.

Carex arenaria, L., var. *remota*, Marss. Churchtown, South Lancs., July 1912. New to v.-c. 59.—J. A. WHELDON. "*C. arenaria*, var. *remota*, recti."—L. KÜKENTHAL. "Yes; but not extreme."—G. C. DRUCE. "Only two specimens sent."—J. CRYER.

Carex divisa, Huds. By R. Colne, Wivenhoe, Essex N., v.-c. 19, June 26, 1912.—G. C. BROWN. "Yes."—A. BENNETT. "Yes."—G. C. DRUCE.

Panicum glabrum, Gaud. Sandy field, Compton, Surrey, Sept. 7, 1911.—C. E. SALMON.

Spartina Townsendi, H. and J. Groves. Mud flats, Hayling Island, South Hants, v.-c. 11, Aug. 1912.—J. COMBER. "Yes."—E. HACKEL.

Phalaris minor, Retz., var. [Ref. No. 30.] With type on waste ground, Lerée, Guernsey, Aug. 13, 1912. Growing with the type. A most distinct looking plant in growth, leaves, and spike. *P. canariensis* grew close by, but I see nothing to suggest a hybrid.—W. C. BARTON. "*P. minor*."—E. HACKEL.

Phalaris minor, Retz., type and var. [Ref. No. 30 (a).] With type on waste ground, Lerée, Guernsey, Aug. 13, 1912. Growing on cultivated ground some 200 yards from No. 30. A stouter plant, but still quite distinct from *Phalaris minor*, type, among which it grew.—W. C. BARTON. "The type *P. minor*. Ref. 30 (a) is forma *gracilis*, approaching *P. gracilis*, Parl."—E. HACKEL.

Phleum pratense, L., var. *nodosum*, L. Chalk pit, Whiteleaf, near Risborough, Bucks, July 8, 1910.—F. L. FOORD-KELCEY. "Yes."—G. C. DRUCE. "*P. pratense*, L., var. *nodosum*, Sm."—E. HACKEL.

Phleum pratense, L., var. *stoloniferum*, Bab. Donibristle, Fife, v.-c. 89, July 21, 1912.—McT. COWAN, jun. "Yes; but it seems a condition rather than a true variety."—G. C. DRUCE. "*P. pratense*, L., var. *stoloniferum*, Neilrich."—E. HACKEL.

Agrostis verticillata, Vill. Roadsides and quarries, on diorites or syenites, near Vale Castle, Guernsey, Aug. 14, 1912. This plant seems to be confined in Guernsey strictly to the Guernsey 'granite' (diorites or syenites), and appears only in the quarries or at the sides of roads constructed of 'granite' or in ditches that drain such roads.—W. C. BARTON. "Yes; it is thoroughly established, if not native, in Guernsey. See *Report* 1906, p. 199, and *Journ. Bot.* 1906, p. 320."—G. C. DRUCE.

Agrostis verticillata, Vill. St David's, Fife, v.-c. 85, July 10, 1911.—McT. COWAN, jun. "No; *Agrostis alba*, L."—J. CRYER and A. B. JACKSON. "Is not this *A. alba*, L., var. *coarctata*, Hoffm.?"—E. S. MARSHALL. "No; this is *A. alba*, var. *coarctata*, Hackel, as E. Hackel agrees, but the var. *coarctata*, Hackel, is not the same as *coarctata*, Hoffm."—G. C. DRUCE.

Agrostis alba, L., var. *major*, Gaud. (?) Cornfield, Walton, S. Lancs., v.-c. 59, July 1912.—J. A. WHELDON. "Yes."—E. HACKEL.

Agrostis canina, L., var. *mutica*, Doel. Auchmore, Killin, v.-c. 88, Sep. 13, 1911.—McT. COWAN, jun. "Yes."—G. C. DRUCE and E. HACKEL.

Agrostis retrofacta, Willd. Sewage tip near Bradford, v.-c. 64, July 7, 1908. This Australian grass appeared in considerable abundance in the season of 1908. In 1909 there was a diminution in quantity. It however has appeared each season since, including this last. Named by Mr A. B. Jackson.—J. CRYER. "Correct."—E. HACKEL. "My specimen appears to be a form of *Aira caryophyllea*, L., or a nearly allied species; perhaps there has been an accidental transfer of labels."—E. S. MARSHALL. "Mr Marshall's specimen was *Agrostis retrofacta*, Willd. There was no transfer of labels."—J. CRYER.

Calamagrostis epigeios, Roth, (?) var. *densiflora*, Ledeb., *Fl. Alt.* i., p. 87, 1829. I name this provisionally as above, as it agrees with a plant so labelled in Kneucker's *Gramineae Exsiccatae*, xvii. Lieferung,

1905. The spikes are denser than in other specimens of *C. epigeios* which I possess, but they were apparently gathered before flowering.—A. B. JACKSON. "This comes indeed very near that variety."—E. HACKEL.

Aira caryophyllea, L. [Ref. No. 4930.] A small pretty form growing with *Hypochaeris glabra* at Frilford, July 1912.—G. C. DRUCE.

Dactylis glomerata, L., var. b. *congesta*, Gren. and Godr. Lancresse Common, Guernsey, Aug. 8, 1912.—W. C. BARTON. "Yes; the older name is *abbreviata*, Bernh."—G. C. DRUCE. "Just like the plant so called, from the Great Orme's Head. A recent visit has confirmed my belief that this is nothing but a starved state."—E. S. MARSHALL. "*D. glomerata*, var. *abbreviata*, Drejer."—E. HACKEL.

Poa Chaixii, Vill. Millwood, Dalton, v.-c. 69, July 15, 1912. This grass is well established here. I can't make even a plausible guess at the mode of introduction. The narrow-leaved parts distributed are from plants in deep shade. For three seasons these plants have produced no flowering culms, while those on what might be called the 'edge of shade' have flowered luxuriantly. The plants maintain the deep glossy ivy-green colour, which is very different from that of any other grass known to us, all the winter. The asperities causing the roughness seem to point upwards on the actual culm and downwards on the sheaths. I hope some member, whose opinion is a weighty one, will agree with me and put on record that 'glabrous' is a misleading description of the veins on these lower pales.—D. LUMB. "Yes; and corroborated by Prof. Lindman and E. Hackel. It is a new county record. I have deleted the term glabrous from my *Pocket Book*; the veins are often, but not as these specimens show, entirely glabrous."—G. C. DRUCE.

Poa palustris, L., var. *effusa*, Achers. and Graebn. [Ref. No. 349.] Old clay-pits, the Rhydd, near Upton-on-Severn, Worcester. Coll., R. F. Towndrow, July 10, 1912. The specimens sent last year were too far advanced; I send a set gathered earlier.—S. H. BICKHAM.

Poa pratensis, L., var. *subcoerulea* (Sm.). Sand-pit, St Martha's Hill, Guildford, Surrey, v.-c. 17, June 1912.—J. COMBER. "Yes."—G. C. DRUCE and E. HACKEL.

Poa nemoralis, L. Damp wall in deep shade, Millwood, Dalton, v.-c. 69, Sept. 11, 1912. Is this type?—D. LUMB. "Var. *coarctata*, Gaud., or between that and the type. Collected too late in the year."—E. S. MARSHALL. "Var. *subuniflora*, Reichb."—E. HACKEL.

Poa nemoralis, var. Wood on Cooper's Hill, v.-c. 33, July 1, 1912. A highly glaucous form, growing with other forms of the species; spikes and spikelets small.—H. J. RIDDELSDELL. "Only weak, shade-grown type." — E. S. MARSHALL. "Var. *subuniflora*, Reichb."—E. HACKEL.

Poa compressa, L. Askham Ironworks, v.-c. 69, July 9, 1912. Is this type? This grass grows so isolated here that I am constrained to think that it is an introduction direct from the Continent.—D. LUMB.—"Yes."—G. C. DRUCE and E. HACKEL.

Glyceria declinata, Bréb. Marshy ground in old quarry, near Little Crosby, S. Lancs., v.-c. 59, July 12, 1912. New to v.-c. 59.—J. A. WHELDON. "Correct."—E. S. MARSHALL. "*G. plicata*, Fries, var. *triticea*, Lange, forma *minor*."—E. HACKEL.

Glyceria procumbens, Dum. Waste ground, Langenhoe Marshes, Essex N., v.-c. 19, May 30, 1912.—G. C. BROWN. "Yes; the combination *G. rupestris* is invalid. There is no evidence to show that the publication of Withering's *Poa rupestris* was prior to *Poa procumbens*, Curtis, which Dr Jackson agrees with me was published in 1795, one year before Withering's *Arrangement* appeared."—G. C. DRUCE. "Yes; the *Schlerochloa procumbens*, Beauv."—E. HACKEL.

Festuca elatior, L., var. *pseudo-loliacea*, Hackel. [Ref. No. 118.] Esk above Musselburgh, v.-c. 83, June 12, 1911.—McT. COWAN, jun. "*F. elatior*, L., sub-species *pratensis genuina*, ad var. *pseudo-loliaceum*, Hack. vergens (but this has only one spikelet on each node of the rachis)."—E. HACKEL.

Festuca ——? Fringe of salt marsh, Aberlady, v.-c. 82, June 3, 1911. Skirting the salt marsh there is a belt of this grass some yards wide and forming in some cases an almost pure association.—McT. COWAN, jun. "*F. rubra*, L., var. *genuina*, Gaud."—E. HACKEL.

Festuca ——? [Ref. No. 108.] Shore meadow, Aberlady, v.-c. 82, Aug. 23, 1911. Spikelets hairy, but not, I think, *F. rubra*, var. *barbata*, Hackel.—McT. COWAN, jun. "*F. rubra*, L., var. *vulgaris*, sub-var. *barbata*, partim. Some peduncles have glabrous spikelets."—E. HACKEL.

Festuca rubra, L., var. [Ref. No. 103.] Caenlochan Glen, Forfar, v.-c. 90, July 23, 1910. Ref. Nos. 102 and 103, both from 2,500 feet. In this place there were three distinct forms growing side by side, one with spikelets almost glabrous, one with spikelets with long hairs, and one with very long awns. These are two of them.

Also *Festuca* ——? Near Dalmeny, v.-c. 84, June 6, 1911.—McT. Cowan, jun. "*F. rubra*, L., var. *genuina*, Gaud."—E. Hackel.

Festuca rubra, L., var. *barbata*, Hack. Freshfield, S. Lancs., v.-c., 59, June 29, 1912.—W. G. Travis. "Yes; Hackel published it as a sub-var. which I think is synonymous with the var. *pubescens*, Gren. and Godr."—G. C. Druce. "Yes."—E. Hackel.

Festuca rubra, L., var. *arenaria*, Fr. Sandy shore, St Osyth, Essex N., v. c. 19, June 13, 1912.—G. C. Brown. "*F. rubra*, L., var. *vulgaris*, Gaud., sub var. *grandiflora*, Hack."—E. Hackel.

Festuca rubra, L., var. *duriuscula*, Syme. [Ref. No. 116.] Duddingston, v.-c. 83, June 2, 1911.—McT. Cowan, jun. "*F. rubra*, type."—G. C. Druce. "Var. *fallax*, Hackel (*F. fallax*, Thuill.). My plant is very weak, and probably shade grown."—E. S. Marshall. "*F. rubra*, L., var. *vulgaris*, Gaud."—E. Hackel.

Bromus tectorum, L. Waste ground, Wakefield, v.-c. 63, July 1912. Growing with *Hypecoum pendulum*, L. Abundant this year.—J. Cryer. "Yes."—G. C. Druce and E. Hackel.

Bromus unioloides, H. B. K. Sewage tip, Bingley, v.-c. 64, Sept. 4, 1912. In abundance. J. Cryer. "Yes."—G. C. Druce and E. Hackel.

Bromus secalinus, L. Banks of Esk, Musselburgh, v.-c. 83, June 6, 1911. Outer palea much less obtuse than usual.—McT. Cowan, jun. "*B. commutatus*, Schrad."—E. Hackel.

Bromus racemosus, L., *forma*. Banks of River Esk, near Inveresk, v.-c. 83, June 6, 1911. A form approaching *B. commutatus*.—McT. Cowan, jun. "*B. hordeaceus*, var. *leptostachys*, Beck."—E. Hackel.

Bromus hordeaceus, L., var. [Ref. No. 4885.] Crowell, Oxford, May 1912. Near the *leptostachys*, Persoon.—G. C. Druce. "*B. hordeaceus*, L., var. *leptostachys*, Beck."—E. Hackel.

Bromus hordeaceus, L., var. Banks of Esk, Musselburgh, June 1911.—McT. Cowan, jun. "*Bromus hordeaceus*, L., var. *leptostachys*, Beck."—E. Hackel.

Bromus hordeaceus, L., var. *microstachys*, Duval-Jouve. [Ref. No. 4798.] Near Louth, Lincoln N., May 1912.—G. C. Druce. "Var. *leptostachys*, Beck., forma *microstachys*."—E. Hackel.

Bromus hordeaceus, L., var. *glabratus*, Doell. [Ref. No. 4790.] Woodstock, Oxon, May 1912.—G. C. DRUCE.

Bromus hordeaceus, L., var. d. *nanus*, Weig. Exposed coast, Lancresse Common, Guernsey, Aug. 14, 1912.—W. C. BARTON. "Merely a starved state of the glabrous plant, var. *leptostachys* = *glabratus*."—E. S. MARSHALL. "*B. hordeaceus*, L., var. *leptostachys*, Beck., forma *nana*. (The var. *nana* of Weigel has hirsute spikelets.)"—E. HACKEL.

Lolium temulentum, L. Amongst oats, Askham, v.-c. 69, Aug. 2, 1912. Mr Hodgson, in his *Flora of Cumberland*, has a very interesting paragraph concerning the association of *Lolium temulentum* and *Raphanus sativus*. It seems very strange that after forty-two years, and in practically the same corner of the country, the same unusual plants should be growing together. The *Raphanus* was the lilac-coloured form; most of that growing in the adjoining gardens was nearly, if not quite, white. Among the same oats were growing *Hordeum hexastichum*, *H. distichum*, *H. jubatum*, *Secale cereale*, *Triticum vulgare*, var. *barbatum*, *T. vulgare* (with densely hairy spikelets), *Lolium arvense*, one plant of *Polypogon monspeliensis*, *Avena fatua*, and *A. sterilis*.—D. LUMB. "Yes."—G. C. DRUCE and E. HACKEL. "Yes; var. *macrochaeton*, A. Br."—J. A. WHELDON.

Lolium temulentum, L., var. *arvense*, With. Growing with the type among oats, etc. Askham, v.-c. 69, Aug. 2, 1912.—D. LUMB. "I suppose so, although with rather more numerous flowers in the spikelets, and sterile basal shoots. It is in good fruit, or these latter might suggest intercrossing."—J. A. WHELDON. "Yes; but Withering described it as a species."—G. C. DRUCE. "Correct."—E. HACKEL.

Lolium multiflorum, Lam. Waste ground, Askham, v.-c. 69, Oct. 1, 1912. Is this type? The young leaves, for some time after emerging from the sheaths, seem to be convolute, one edge being free. *Italicum* is frequently so too.—D. LUMB. "Rooting at nodes and looks as though perennial. Is it not a state of *L. italicum*, although so untypical looking?"—J. A. WHELDON. "Correct."—E. HACKEL.

Agropyron ——(?). [Ref. No. 126.] Inveresk, July 8, 1911.—McT. COWAN, jun. "*A. pungens*, R. and S."—E. HACKEL.

Agropyron pungens, R. and S., var. *aristatum*, Hack. In great abundance at the mouth of the small river Kerr, Carnforth, v.-c. 60, Aug. 1912. Named by Mr A. B. Jackson.—J. CRYER. "= *A. pungens*, Reichb."—E. HACKEL.

Agropyron junceum × *repens.* Burton Bradstock, v.-c. 9, July 18, 1912. Scarce.—H. J. RIDDELSDELL. "Yes; *Triticum laxum*, Fr."—E. S. MARSHALL. "Yes; under my × *A. Hackelii*, but *superjunceum.*"—G. C. DRUCE. "Yes."—E. HACKEL.

Agropyron —— (?) [Ref. No. 124.] Inverkeithing, Fife, v.-c. 85, July 4, 1911. Rachis covered with a thick pubescence. Is this the var. *lasiorachis*, Hackel? I do not know it.—McT. COWAN, jun. "Forma *trichorachis*, Rohlena in Bölun *Ges. Wiss.* 1899, xxiv., 5, 8."—E. HACKEL. "Practically identical with *A. repens*, var. *lasiorachis*, Hackel."—G. C. DRUCE.

Agropyron repens, Beauv. [Ref. No. 122.] Turnhouse, v.-c. 83, June 29, 1911.—McT. COWAN, jun. "Var. *Leersianum*, Gray = *barbatum*, Duval-Jouve."—E. S. MARSHALL. "*A. repens*, Beauv., var. *Vaillantianum*, Reichb."—E. HACKEL.

Agropyron repens, Beauv., var. [Ref. No. 123.] Near Blackford Hill, v.-c. 83, July 11, 1911.—McT. COWAN, jun. "*A. repens*, Beauv., var. *arvense*, Reichb."—E. HACKEL.

Agropyron repens, Beauv., var. [Ref. No. 138.] Turnhouse, v.-c. 83, Sept. 29, 1911.—McT. COWAN, jun. "*A. repens*, var. *dumetorum*, Reichb."—E. HACKEL.

Agropyron repens, L., var. *Leersianum*, S. F. Gray. Shore of R. Mersey, Hale, S. Lancs, v.-c. 59, Aug. 1912.—W. G. TRAVIS.

Agropyron pungens, R. and S. [Ref. No. 127.] St David's, Fife, v.-c. 85, Aug. 10, 1911.—McT. COWAN, jun. "*A. repens*, var. *dumetorum*, Reichb."—E. HACKEL.

Elymus arenarius, L. Sea coast, Mostyn, Flint, v.-c. 51, July 13, 1912.—C. WATERFALL.

Equisetum palustre, L., *forma* (or hybrid?) Sandy ground near Altcar, S. Lancs., v.-c. 59, July 1912. Procumbent, or main stem erect with procumbent long lower branches. All the branches are deflexed, then ascending. Both *E. palustre* and *E. arvense* are abundant in the vicinity. I have observed it for two years without seeing any signs of fructification.—J. A. WHELDON.

Near Southport Dr Graebner pointed out to me in 1911, what he considered to be *E. litorale*, but although I have specimens I have not had time to make the requisite sections. Both the assumed parents were in the vicinity.—G. C. DRUCE.

Equisetum variegatum, Schleich. Pools on sand hills, Ainsdale, S. Lancs., v.-c. 59, April 27, 1912.—C. WATERFALL. "No; this is *E. palustre*, L., var. *nudum*, Newman, or very near it."—E. S. MARSHALL. "One stem of *E. variegatum* and several of *E. palustre*, on my sheet. The latter is in a simple, slightly branched or entirely unbranched form."—J. A. WHELDON. "My specimens were mixed."—G. C. DRUCE.

Pteridium aquilinum, L., var. *lanuginosum* (Bory), vel *Pteris aquilina*, L., var. *lanuginosa*, Bory. Stow Wood, Oxon, with Dr Stapf and Dr Domin, Oct. 1912. This form characterised by the hairs on the under surface of the pinnae. Dr Domin pointed it out to me. See *Report* 1912, p. 185.—G. C. DRUCE.

Asplenium marinum, L. Carboniferous limestone rocks, facing sea, Puffin Island, Anglesea, v.-c. 52, May 18, 1912.—C. WATERFALL.

Lastrea alpina, Wollaston. Origin, rock clefts on Braeriach at 2800 feet, Easterness, July 1909. Cult., Walton, 1912. This remains constant in cultivation. Its habit is strikingly different from that of *L. aristata*, the lowest pair of pinnae being placed at a different angle from the other, giving the frond a shuttlecock-like appearance. This is not evident in dried specimens. See *Report* 1911, p. 145.—J. A. WHELDON.

Isoetes hystrix, Durieu. Damp ground, near Fort le Marchant, Guernsey, Aug. 8, 1912.—W. C. BARTON.

Azolla filiculoides, Lam. Woodbastwick, Norfolk. I noticed this last year, but did not collect it, and too rashly assumed it was *A. caroliniana*, Willd. Dr Ostenfeld, who took some, names it as above (see *Report* 1912, p. 186). I owe these specimens to the kindness of the owner of Woodbastwick, J. Cator, Esq., M.P., who sent me them in late August when the plant was fruiting freely. When in fruit the glochidia which are without septa offer a definite means of identification. In *caroliniana* (teste N. E. Brown) the glochidia are septate.—G. C. DRUCE.

Azolla filiculoides, Lam. In brackish water near Queenstown Junction, Co. Cork. Noticed but not collected by me on the Internat. Phyt.-Geog. Excurs. and assumed to be *A. caroliniensis*, but those specimens kindly supplied by R. H. Beamish, Esq., Oct. 1912, prove it (teste N. E. Brown) to be the above species.—G. C. DRUCE.

Nitella gracilis, Agardh. Perranzabuloe, West Cornwall, v.-c. 1, Oct. 19, 1912. Coll., F. RILSTONE and C. C. VIGURS. "Mr Rilstone's

discovery of this very rare species in Cornwall represents a notable extension of its known distribution."—J. GROVES.

Nitella ——? Sparingly in Amberley Wild Brooks, Sussex, July 18, 1912. *N. prolifera* is given for this locality on Mr T. Hilton's authority in 1900 in Arnold's *Sussex Flora*.—A. WEBSTER. "*Tolypella prolifera*, Leonh." J. GROVES.

Chara Braunii, Gmel. Canal near Reddish, S. Lancs., v.-c. 59, Aug. 10, 1891.—J. A. WHELDON. "Small to the fruit gatherings."—A. BENNETT.

Chara longibracteata, Kütz. Ditch near the shore, Churchtown, S. Lancs, v.-c. 59, July 1912.—J. A. WHELDON. "= *C. vulgaris*, L., var. *longibracteata*, Kütz., *Sp. Alg.*, 1849."—A. BENNETT.

Chara baltica, Bruzel (fide H. and J. Groves). Bay of Voy, Loch of Stenness, Sandwick, Mainland, Orkney, Aug. 20, 1912. Native. Plant slightly fœtid.—H. H. JOHNSTON.

Chara aspera, Willd. Pools near the shore, Leasowe, Cheshire, v.-c. 58, Aug. 1903.—J. A. WHELDON. "Not given for county in *Flora of Cheshire*, 1899, but *C. hispida* is for same locality. The authority not conclusive."—A. BENNETT. "Yes."—J. GROVES.

Chara fragilis, Desv., var. *delicatula*, Braun (fide H. and J. Groves). Stony bed at bottom of running water in a burn 250 feet above sea level. Burn of Selta, Stromness, Mainland, Orkney, Aug. 23, 1912. Plant slightly fœtid.—H. H. JOHNSTON.

Mr S. H. BICKHAM kindly sent a series of packets of seeds for distribution:—*Isatis tinctoria*, *Hypericum undulatum*, *Bupleurum falcatum*, *Sonchus palustris*, and *Stachys germanica*; and Mr D. LUMB an interesting series of dwarf plants growing on slag at Askham, on the Duddon estuary. But the exigencies of space forbid details. Mr C. E. SALMON suggests the *Sagina procumbens* is *S. apetala*, the *Arenaria serpyllifolia* is *A. leptoclados*, the *Centaurium umbellatum* is *C. litorale*, and the *Matricaria inodora*, var. *maritima* is the var. *salina*.

Mr HUNNYBUN's present address is Camperdown, Alpine Road, Ventnor, Isle of Wight.

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